DSC-HX9/HX9V

SERVICE MANUAL

LEVEL 3

Ver. 1.1 2011.07

US Model
Canadian Model
AEP Model
UK Model
E Model
Australian Model
Hong Kong Model
Chinese Model
Korea Model
Japanese Model
Tourist Model

Photo: DSC-HX9V/Black

Check the SERVICE NOTE (LEVEL 2) before the service.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

DSC-HX9/HX9V_L3

9-834-574-12

DIGITAL STILL CAMERA

SONY

Sony Corporation

983457412.pdf

Revision History

*: S.M. revised only top cover.

Ver.	Date	History	Contents	S.M. Rev. issued
1.0	2011.02	Official Release	—	—
1.1	2011.07	Supplement-1 (S1 11-154)	• Change of PRINTED WIRING BOARDS • Change of SCHEMATIC DIAGRAMS • Change of RL-109 Board Part Number Suffix 11 to 21	Yes*

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Caution
Danger of explosion if battery is incorrectly replaced.
Replace only with the same or equivalent type.
Dispose of used batteries according to the instructions.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety checks before releasing the set to the customer.

1. Check the area of your repair for unsoldered or poorly-soldered connections. Check the entire board surface for solder splashes and bridges.
2. Check the interboard wiring to ensure that no wires are “pinched” or contact high-wattage resistors.
3. Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair. Point them out to the customer and recommend their replacement.
4. Look for parts which, through functioning, show obvious signs of deterioration. Point them out to the customer and recommend their replacement.
5. Check the B+ voltage to see it is at the values specified.
6. Flexible Circuit Board Repairing
   - Set the soldering iron tip temperature to 350 °C approximately.
   - Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
   - Be careful not to apply force on the conductor when soldering or unsoldering.

UNLEADED SOLDER

This unit uses unleaded solder.
Boards requiring use of unleaded solder are printed with the lead free mark (LF) indicating the solder contains no lead.
(**Caution:** Some printed circuit boards may not come printed with the lead free mark due to their particular size.)

: LEAD FREE MARK

Be careful to the following points to solder or unsolder.

- Set the soldering iron tip temperature to 350 °C approximately.
  If cannot control temperature, solder/unsolder at high temperature for a short time.
  Caution: The printed pattern (copper foil) may peel away if the heated tip is applied for too long, so be careful!
  Unleaded solder is more viscous (sticky, less prone to flow) than ordinary solder so use caution not to let solder bridges occur such as on IC pins, etc.
- Be sure to control soldering iron tips used for unleaded solder and those for leaded solder so they are managed separately. Mixing unleaded solder and leaded solder will cause detachment phenomenon.

注意
電池の交換は，正しく行わないと破裂する恐れがあります。
電池を交換する場合には必ず同じ型名の電池又は同等品と交換してください。
使用済み電池は，取扱指示に従って処分してください。

サービス，点検時には次のことにご注意ください。

1. 注意事項をお守りください。
   サービスのとき特に注意を要する個所については，キャビネット，シャーシ，部品などにラベルや捺印で注意事項を表示しています。これらの注意書き及び取扱説明書等の注意事項を必ずお守り下さい。
2. 指定部品のご使用を
   セットの部品は難燃性や耐電圧など安全上の特性を持ったものとなっています。従って交換部品は，使用されていたものと同じ特性の部品を使用して下さい。特に回路図，部品表に⚠印で指定されている安全上重要な部品は必ず指定のものをご使用下さい。
3. 部品の取付けや配線の引きまわしはもとどおりに
   安全上，チューブやテープなどの絶縁材料を使用したり，プリント基板から浮かして取付けた部品があります。また内部配線は引きまわしやクランパによって発熱部品や高圧部品に接近しないよう配慮されていますので，これらは必ずもとどおりにして下さい。
4. サービス後は安全点検を
   サービスのために取外したネジ，部品，配線がもとどおりになっているか，またサービスした個所の周辺を劣化させてしまったところがないかなどを点検し，安全性が確保されていることを確認して下さい。
5. チップ部品交換時の注意
   - 取外した部品は再使用しないで下さい。
   - タンタルコンデンサのマイナス側は熱に弱いため交換時は注意して下さい。
6. フレキシブルプリント基板の取扱いについて
   - 半田こてのこて先温度は約350℃に設定してください。
   - 同一パターンに何度もコテ先を当てないで下さい。（3回以内）
   - パターンに力が加わらないよう注意して下さい。

無鉛半田について
本機には無鉛半田が使用されています。
無鉛半田を使用している基板には，無鉛(Lead Free)を意味するレッドフリーマークがプリントされています。
（注意：基板サイズによっては，無鉛半田を使用していてもレッドフリーマークがプリントされていないものがあります）

：レッドフリーマーク
無鉛半田は，下記の点に注意して使用してください。

- 半田こてのこて先温度は約350℃に設定してください。
  温度調節が無理な場合は，高温短時間で作業を行ってください。
  注意： 半田こてを長く当てすぎると，基板のパターン(銅箔)がはがれてしまうことがありますので，注意してください。また，従来の半田よりも粘性が強いため，IC端子などが半田ブリッジしないように注意してください。
- 半田こてのこて先は，必ず無鉛半田用と有鉛半田用に分けて管理してください。
  無鉛半田と有鉛半田が混在すると剥離現象が発生してしまいます。

2. REPAIR PARTS LIST

AF-137 | BT-070 | CD-813 | MS-461 | RL-109 | RL-115 | ST-262 | FL-208 | SY-286

(ENGLISH)

NOTE:

- -XX, -X mean standardized parts, so they may have some differences from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- CAPACITORS:
  uF: µF
- COILS
  uH: µH
- RESISTORS
  All resistors are in ohms.
  METAL: metal-film resistor
  METAL OXIDE: Metal Oxide-film resistor
  F: nonflammable
- SEMICONDUCTORS
  In each case, u: µ, for example:
  uA...: µA... , uPA... , µPA... ,
  uPB... , µPB... , uPC... , µPC... ,
  uPD..., µPD...

When indicating parts by reference number, please include the board name.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

Caution
Danger of explosion if battery is incorrectly replaced.
Replace only with the same or equivalent type.
Dispose of used batteries according to the instructions.

Note 1: Be sure to read "Precautions for Replacement of Imager" on page 6-1.

(JAPANESE)

【使用上の注意】

- ここに記載されている部品は, 補修用部品であるため, 回路図及びセットに付いている部品と異なる場合があります。
- -XX, -Xは標準化部品のため, セットに付いている部品と異なる場合があります。
- *印の部品は常備在庫しておりません。
- コンデンサの単位でuFはµFを示します。
- 抵抗の単位Ωは省略してあります。
  金　　被：金属被膜抵抗。
  サンキン：酸化金属被膜抵抗。
- インダクタの単位でuHはµHを示します。
- 半導体の名称でuA..., uPA..., uPB..., uPC..., uPD...等はそれぞれµA..., µPA..., µPB..., µPC..., µPD...を示します。

お願い
図面番号で部品を指定するときは基板名又はブロックを併せて指定してください。

⚠印の部品，または⚠印付の点線で囲まれた部品は，安全性を維持するために，重要な部品です。
従って交換時は，必ず指定の部品を使用してください。

注意
電池の交換は，正しく行わないと破裂する恐れがあります。
電池を交換する場合には必ず同じ型名の電池又は同等品と交換してください。
使用済み電池は，取扱指示に従って処分してください。

Note 1: イメージャの交換時は6-1ページの"イメージャ交換時の注意"を必ずお読みください。

2-2. ELECTRICAL PARTS LIST

Ref. No.	Part No.	Description			
	A-1818-411-A	AF-137 BOARD, COMPLETE **********			
	1-883-056-11	BT-070 FLEXIBLE BOARD **********			
(BT901 is not included in BT-070 FLEXIBLE BOARD.)					
		< BATTERY TERMINAL BOARD >			
⚠BT901	1-780-764-11	TERMINAL BOARD, BATTERY			
	A-1818-412-A	CD-813 BOARD, COMPLETE **********			
(All mounted parts are not supplied, but they are included in CD-813 COMPLETE BOARD.)					
	1-542-862-41	MICROPHONE UNIT **********			
	A-1818-410-A	MS-461 BOARD, COMPLETE **********			
(BT001 is not included in MS-461 COMPLETE BOARD.)					
		< BATTERY >			
⚠BT001	1-756-813-11	LITHIUM RECHARGEABLE BATTERY			
		< CAPACITOR >			
* C002	1-112-716-11	CERAMIC CHIP	0.1uF	10%	6.3V
* C003	1-112-716-11	CERAMIC CHIP	0.1uF	10%	6.3V
C007	1-128-623-91	CERAMIC CHIP	220PF	10%	16V
C008	1-128-625-91	CERAMIC CHIP	470PF	10%	16V
		< CONNECTOR >			
* CN001	1-821-502-11	CONNECTOR, FPC (ZIF) 29P			
CN002	1-822-837-21	CARD CONNECTOR			
		< RESISTOR >			
R001	1-240-687-91	METAL CHIP	220	5%	1/20W
R005	1-240-681-91	METAL CHIP	68	5%	1/20W
R007	1-240-679-91	METAL CHIP	47	5%	1/20W
		< THERMISTOR >			
TH001	1-805-194-21	THERMISTOR, NTC (SMD)			

Ref. No.	Part No.	Description			
	A-1818-408-A	RL-109 BOARD, COMPLETE (HX9V)			
	A-1818-409-A	RL-109 BOARD, COMPLETE (HX9) **********			
(All mounted parts are not supplied, but they are included in RL-109 COMPLETE BOARD.)					
	1-884-119-11	RL-115 FLEXIBLE BOARD **********			
	A-1817-110-A	STROBOSCOPE BLOCK ASSY (950)			
	(Not supplied)	ST-262 BOARD, COMPLETE			
	(Not supplied)	FL-208 FLEXIBLE BOARD **********			
(All mounted parts, ST-262 COMPLETE BOARD and FL-208 FLEXIBLE BOARD are not supplied, but they are included in STROBOSCOPE BLOCK ASSY (950).)					
⚠	(Not supplied)	FLASH UNIT			
	A-1818-414-A	SY-286 BOARD, COMPLETE (SERVICE) **********			
(IC202 is not supplied, but this is included in SY-286 COMPLETE BOARD (SERVICE).)					
		< CAPACITOR >			
C001	1-100-611-91	CERAMIC CHIP	22uF	20%	6.3V
C002	1-165-989-11	CERAMIC CHIP	10uF	10%	6.3V
C003	1-100-611-91	CERAMIC CHIP	22uF	20%	6.3V
C004	1-100-611-91	CERAMIC CHIP	22uF	20%	6.3V
C005	1-100-611-91	CERAMIC CHIP	22uF	20%	6.3V
C006	1-112-717-91	CERAMIC CHIP	1uF	10%	6.3V
* C007	1-114-582-11	CERAMIC CHIP	0.1uF	10%	16V
* C008	1-114-582-11	CERAMIC CHIP	0.1uF	10%	16V
* C009	1-114-582-11	CERAMIC CHIP	0.1uF	10%	16V
C010	1-100-611-91	CERAMIC CHIP	22uF	20%	6.3V
C011	1-100-611-91	CERAMIC CHIP	22uF	20%	6.3V
C012	1-165-989-11	CERAMIC CHIP	10uF	10%	6.3V
* C013	1-114-582-11	CERAMIC CHIP	0.1uF	10%	16V
C014	1-100-671-11	CERAMIC CHIP	4.7uF	20%	25V
C020	1-112-717-91	CERAMIC CHIP	1uF	10%	6.3V
C022	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
* C026	1-112-716-11	CERAMIC CHIP	0.1uF	10%	6.3V
* C027	1-112-716-11	CERAMIC CHIP	0.1uF	10%	6.3V
* C028	1-112-716-11	CERAMIC CHIP	0.1uF	10%	6.3V
* C029	1-112-716-11	CERAMIC CHIP	0.1uF	10%	6.3V
C054	1-131-664-91	CERAMIC CHIP	0.15uF	10%	10V
C056	1-114-246-11	CERAMIC CHIP	1uF	20%	25V
* C058	1-114-582-11	CERAMIC CHIP	0.1uF	10%	16V
* C060	1-112-746-11	CERAMIC CHIP	4.7uF	10%	6.3V
C061	1-112-717-91	CERAMIC CHIP	1uF	10%	6.3V
C062	1-165-989-11	CERAMIC CHIP	10uF	10%	6.3V
* C064	1-114-582-11	CERAMIC CHIP	0.1uF	10%	16V
C065	1-112-300-91	CERAMIC CHIP	4.7uF	10%	10V
C071	1-112-717-91	CERAMIC CHIP	1uF	10%	6.3V
* C072	1-114-582-11	CERAMIC CHIP	0.1uF	10%	16V

Ref. No.	Part No.	Description			
C074	1-112-717-91	CERAMIC CHIP	1uF	10%	6.3V
C076	1-128-632-91	CERAMIC CHIP	0.01uF	10%	6.3V
C102	1-112-717-91	CERAMIC CHIP	1uF	10%	6.3V
C103	1-112-717-91	CERAMIC CHIP	1uF	10%	6.3V
C104	1-112-717-91	CERAMIC CHIP	1uF	10%	6.3V
C105	1-100-415-91	CERAMIC CHIP	0.47uF	10%	6.3V
C106	1-100-415-91	CERAMIC CHIP	0.47uF	10%	6.3V
C107	1-107-819-11	CERAMIC CHIP	0.022uF	10%	16V
* C108	1-114-582-11	CERAMIC CHIP	0.1uF	10%	16V
C109	1-107-819-11	CERAMIC CHIP	0.022uF	10%	16V
C110	1-112-717-91	CERAMIC CHIP	1uF	10%	6.3V
C111	1-112-717-91	CERAMIC CHIP	1uF	10%	6.3V
C112	1-112-717-91	CERAMIC CHIP	1uF	10%	6.3V
* C113	1-114-582-11	CERAMIC CHIP	0.1uF	10%	16V
C114	1-164-852-11	CERAMIC CHIP	12PF	5%	50V
C115	1-164-852-11	CERAMIC CHIP	12PF	5%	50V
* C116	1-112-746-11	CERAMIC CHIP	4.7uF	10%	6.3V
* C118	1-112-716-11	CERAMIC CHIP	0.1uF	10%	6.3V
* C119	1-112-716-11	CERAMIC CHIP	0.1uF	10%	6.3V
C202	1-112-717-91	CERAMIC CHIP	1uF	10%	6.3V
C206	1-112-815-91	CERAMIC CHIP	10uF	20%	6.3V
* C207	1-112-716-11	CERAMIC CHIP	0.1uF	10%	6.3V
* C208	1-112-716-11	CERAMIC CHIP	0.1uF	10%	6.3V
* C209	1-112-716-11	CERAMIC CHIP	0.1uF	10%	6.3V
* C211	1-112-716-11	CERAMIC CHIP	0.1uF	10%	6.3V
* C212	1-112-716-11	CERAMIC CHIP	0.1uF	10%	6.3V
* C213	1-112-716-11	CERAMIC CHIP	0.1uF	10%	6.3V
* C215	1-112-716-11	CERAMIC CHIP	0.1uF	10%	6.3V
C216	1-116-403-91	CERAMIC CHIP	10uF	10%	6.3V
* C217	1-112-746-11	CERAMIC CHIP	4.7uF	10%	6.3V
* C218	1-112-716-11	CERAMIC CHIP	0.1uF	10%	6.3V
* C219	1-112-716-11	CERAMIC CHIP	0.1uF	10%	6.3V
* C220	1-112-716-11	CERAMIC CHIP	0.1uF	10%	6.3V
* C221	1-112-716-11	CERAMIC CHIP	0.1uF	10%	6.3V
C223	1-116-403-91	CERAMIC CHIP	10uF	10%	6.3V
* C224	1-112-716-11	CERAMIC CHIP	0.1uF	10%	6.3V
* C225	1-112-716-11	CERAMIC CHIP	0.1uF	10%	6.3V
* C226	1-112-716-11	CERAMIC CHIP	0.1uF	10%	6.3V
* C227	1-114-582-11	CERAMIC CHIP	0.1uF	10%	16V
* C229	1-114-582-11	CERAMIC CHIP	0.1uF	10%	16V
* C230	1-114-582-11	CERAMIC CHIP	0.1uF	10%	16V
* C232	1-114-582-11	CERAMIC CHIP	0.1uF	10%	16V
C233	1-128-632-91	CERAMIC CHIP	0.01uF	10%	6.3V
* C234	1-112-716-11	CERAMIC CHIP	0.1uF	10%	6.3V
* C235	1-112-716-11	CERAMIC CHIP	0.1uF	10%	6.3V
* C236	1-112-716-11	CERAMIC CHIP	0.1uF	10%	6.3V
* C237	1-112-746-11	CERAMIC CHIP	4.7uF	10%	6.3V
* C238	1-112-716-11	CERAMIC CHIP	0.1uF	10%	6.3V
C241	1-100-611-91	CERAMIC CHIP	22uF	20%	6.3V
C242	1-100-611-91	CERAMIC CHIP	22uF	20%	6.3V
C248	1-116-403-91	CERAMIC CHIP	10uF	10%	6.3V
C249	1-116-403-91	CERAMIC CHIP	10uF	10%	6.3V
* C261	1-112-716-11	CERAMIC CHIP	0.1uF	10%	6.3V
* C262	1-112-716-11	CERAMIC CHIP	0.1uF	10%	6.3V
* C263	1-112-716-11	CERAMIC CHIP	0.1uF	10%	6.3V
* C264	1-112-716-11	CERAMIC CHIP	0.1uF	10%	6.3V
* C265	1-112-716-11	CERAMIC CHIP	0.1uF	10%	6.3V
* C266	1-112-716-11	CERAMIC CHIP	0.1uF	10%	6.3V
* C267	1-112-716-11	CERAMIC CHIP	0.1uF	10%	6.3V

Ref. No.	Part No.	Description			
* C268	1-112-716-11	CERAMIC CHIP	0.1uF	10%	6.3V
* C270	1-112-716-11	CERAMIC CHIP	0.1uF	10%	6.3V
* C271	1-112-716-11	CERAMIC CHIP	0.1uF	10%	6.3V
* C272	1-112-716-11	CERAMIC CHIP	0.1uF	10%	6.3V
* C273	1-112-716-11	CERAMIC CHIP	0.1uF	10%	6.3V
* C274	1-112-716-11	CERAMIC CHIP	0.1uF	10%	6.3V
* C276	1-112-716-11	CERAMIC CHIP	0.1uF	10%	6.3V
* C277	1-112-716-11	CERAMIC CHIP	0.1uF	10%	6.3V
* C282	1-112-716-11	CERAMIC CHIP	0.1uF	10%	6.3V
* C284	1-112-716-11	CERAMIC CHIP	0.1uF	10%	6.3V
* C285	1-112-716-11	CERAMIC CHIP	0.1uF	10%	6.3V
* C286	1-112-716-11	CERAMIC CHIP	0.1uF	10%	6.3V
* C287	1-112-716-11	CERAMIC CHIP	0.1uF	10%	6.3V
* C288	1-112-716-11	CERAMIC CHIP	0.1uF	10%	6.3V
* C290	1-112-716-11	CERAMIC CHIP	0.1uF	10%	6.3V
C361	1-100-611-91	CERAMIC CHIP	22uF	20%	6.3V
* C362	1-112-716-11	CERAMIC CHIP	0.1uF	10%	6.3V
* C363	1-112-746-11	CERAMIC CHIP	4.7uF	10%	6.3V
* C365	1-112-716-11	CERAMIC CHIP	0.1uF	10%	6.3V
* C366	1-112-716-11	CERAMIC CHIP	0.1uF	10%	6.3V
* C368	1-112-716-11	CERAMIC CHIP	0.1uF	10%	6.3V
* C369	1-112-716-11	CERAMIC CHIP	0.1uF	10%	6.3V
* C370	1-112-716-11	CERAMIC CHIP	0.1uF	10%	6.3V
* C371	1-112-716-11	CERAMIC CHIP	0.1uF	10%	6.3V
C372	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C375	1-100-611-91	CERAMIC CHIP	22uF	20%	6.3V
C376	1-100-611-91	CERAMIC CHIP	22uF	20%	6.3V
C377	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C378	1-128-627-91	CERAMIC CHIP	0.001uF	10%	16V
C379	1-128-627-91	CERAMIC CHIP	0.001uF	10%	16V
* C380	1-112-746-11	CERAMIC CHIP	4.7uF	10%	6.3V
* C381	1-112-716-11	CERAMIC CHIP	0.1uF	10%	6.3V
* C382	1-112-746-11	CERAMIC CHIP	4.7uF	10%	6.3V
C383	1-128-627-91	CERAMIC CHIP	0.001uF	10%	16V
C384	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
* C385	1-112-716-11	CERAMIC CHIP	0.1uF	10%	6.3V
* C386	1-114-582-11	CERAMIC CHIP	0.1uF	10%	16V
* C387	1-112-716-11	CERAMIC CHIP	0.1uF	10%	6.3V
* C388	1-112-716-11	CERAMIC CHIP	0.1uF	10%	6.3V
* C404	1-114-872-91	TANTAL. CHIP	47uF	20%	10V
* C405	1-112-716-11	CERAMIC CHIP	0.1uF	10%	6.3V
* C406	1-112-716-11	CERAMIC CHIP	0.1uF	10%	6.3V
* C407	1-112-716-11	CERAMIC CHIP	0.1uF	10%	6.3V
* C408	1-112-716-11	CERAMIC CHIP	0.1uF	10%	6.3V
C413	1-165-887-91	CERAMIC CHIP	0.22uF	10%	6.3V
C414	1-165-887-91	CERAMIC CHIP	0.22uF	10%	6.3V
C415	1-165-887-91	CERAMIC CHIP	0.22uF	10%	6.3V
C416	1-165-887-91	CERAMIC CHIP	0.22uF	10%	6.3V
* C420	1-114-582-11	CERAMIC CHIP	0.1uF	10%	16V
* C429	1-114-582-11	CERAMIC CHIP	0.1uF	10%	16V
C430	1-107-819-11	CERAMIC CHIP	0.022uF	10%	16V
* C431	1-114-582-11	CERAMIC CHIP	0.1uF	10%	16V
C432	1-107-819-11	CERAMIC CHIP	0.022uF	10%	16V
* C434	1-114-582-11	CERAMIC CHIP	0.1uF	10%	16V
* C436	1-114-582-11	CERAMIC CHIP	0.1uF	10%	16V
C437	1-128-628-91	CERAMIC CHIP	0.0022uF	10%	6.3V
C438	1-128-628-91	CERAMIC CHIP	0.0022uF	10%	6.3V
C439	1-112-717-91	CERAMIC CHIP	1uF	10%	6.3V

Ref. No.	Part No.	Description			
C440	1-112-717-91	CERAMIC CHIP	1uF	10%	6.3V
* C441	1-114-582-11	CERAMIC CHIP	0.1uF	10%	16V
C442	1-128-632-91	CERAMIC CHIP	0.01uF	10%	6.3V
C443	1-128-632-91	CERAMIC CHIP	0.01uF	10%	6.3V
C444	1-100-965-91	CERAMIC CHIP	0.047uF	10%	6.3V
C445	1-100-965-91	CERAMIC CHIP	0.047uF	10%	6.3V
C446	1-100-965-91	CERAMIC CHIP	0.047uF	10%	6.3V
C447	1-100-965-91	CERAMIC CHIP	0.047uF	10%	6.3V
* C701	1-112-692-11	CERAMIC CHIP	1000PF	5%	50V
* C702	1-112-746-11	CERAMIC CHIP	4.7uF	10%	6.3V
C703	1-112-717-91	CERAMIC CHIP	1uF	10%	6.3V
C705	1-114-983-91	CERAMIC CHIP	2.2uF	10%	16V
* C706	1-112-746-11	CERAMIC CHIP	4.7uF	10%	6.3V
C707	1-112-300-91	CERAMIC CHIP	4.7uF	10%	10V
C709	1-100-415-91	CERAMIC CHIP	0.47uF	10%	6.3V
C710	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C711	1-112-300-91	CERAMIC CHIP	4.7uF	10%	10V
* C712	1-112-746-11	CERAMIC CHIP	4.7uF	10%	6.3V
C713	1-112-717-91	CERAMIC CHIP	1uF	10%	6.3V
C714	1-112-717-91	CERAMIC CHIP	1uF	10%	6.3V
C715	1-112-717-91	CERAMIC CHIP	1uF	10%	6.3V
C716	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C717	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
* C718	1-114-582-11	CERAMIC CHIP	0.1uF	10%	16V
* C719	1-114-582-11	CERAMIC CHIP	0.1uF	10%	16V
C720	1-164-933-11	CERAMIC CHIP	220PF	10%	50V
		< CONNECTOR >			
CN403	1-821-500-21	CONNECTOR, FPC (ZIF) 45P			
* CN701	1-821-501-11	CONNECTOR, FPC (ZIF) 51P			
CN702	1-842-602-11	CONNECTOR, HDMI			
* CN703	1-820-634-51	CONNECTOR, FPC (LIF (NON-ZIF)) 10P			
* CN704	1-816-655-51	FFC/CONNECTOR, FPC (LIF) 8P			
CN705	1-822-970-11	MULTI CONNECTOR (REC)			
CN706	1-821-500-21	CONNECTOR, FPC (ZIF) 45P			
* CN707	1-822-378-11	CONNECTOR, FPC (ZIF) 33P			
* CN708	1-842-522-21	CONNECTOR, FPC (ZIF) 61P			
		< DIODE >			
D001	6-502-934-01	DIODE	DB2S31100K8		
D002	6-503-318-01	DIODE	DB2J20100L		
D055	6-503-217-01	DIODE	RKZ5.6B2KJR1		
* D056	6-502-988-01	DIODE	RB480Y-40T2R		
* D208	6-502-988-01	DIODE	RB480Y-40T2R		
D702	8-719-056-23	DIODE	MA2S111-(K8).SO		
* D703	6-502-766-01	DIODE	SML-D12V8WT86RSN		
D704	6-502-934-01	DIODE	DB2S31100K8		
D705	6-502-934-01	DIODE	DB2S31100K8		
D706	6-502-934-01	DIODE	DB2S31100K8		
D707	6-502-934-01	DIODE	DB2S31100K8		
		< FUSE >			
⚠*F001	1-576-843-31	FUSE	0.8A	32V	
⚠*F051	1-576-415-31	FUSE	2A	32V	
⚠*F052	1-576-843-31	FUSE	0.8A	32V	
⚠*F057	1-576-843-31	FUSE	0.8A	32V	

Ref. No.	Part No.	Description	
		< FERRITE BEAD >	
* FB101	1-481-843-21	FERRITE, EMI (SMD 0603)	
* FB201	1-481-843-21	FERRITE, EMI (SMD 0603)	
* FB202	1-481-843-21	FERRITE, EMI (SMD 0603)	
* FB203	1-481-843-21	FERRITE, EMI (SMD 0603)	
FB204	1-481-361-21	FERRITE, EMI (SMD)	
FB261	1-469-580-21	INDUCTOR, FERRITE BEAD (1005)	
FB270	1-400-723-11	INDUCTOR, FERRITE BEAD (1005)	
FB361	1-400-619-11	BEAD, FERRITE (CHIP) (1608)	
* FB401	1-481-843-21	FERRITE, EMI (SMD 0603)	
* FB701	1-481-843-21	FERRITE, EMI (SMD 0603)	
* FB702	1-481-843-21	FERRITE, EMI (SMD 0603)	
		< IC >	
IC001	6-716-846-01	IC	MB44C022PW-G-ERE1
IC003	6-716-873-01	IC	RP109L111DA-TR
IC004	6-717-073-01	IC	R1163K501D-TR
IC005	6-717-070-01	IC	RP110L121D-TR
IC006	6-717-072-01	IC	RP110L181D-TR
IC052	6-716-783-01	IC	BD11600NUX-E2
IC055	6-716-784-01	IC	MAX8934GETI+TCAK
IC056	6-713-788-01	IC	BD6046
IC057	6-706-488-01	IC	TC7SH14FU
IC101	6-716-838-01	IC	BU76381GUW-E2
* IC201	6-716-958-01	IC	uPD79F0107FC-404-2N1-E2-A
IC202	(Not supplied)	IC	AVY1G1501B
IC207	6-716-878-01	IC	AK8153AU-L
IC401	6-716-760-01	IC	R2J30503LG
IC402	6-715-211-01	IC	MM3404A28URE
		< COIL >	
L001	1-481-036-11	INDUCTOR	4.7uH
L002	1-460-359-11	INDUCTOR	4.7uH
L003	1-481-036-11	INDUCTOR	4.7uH
L004	1-481-036-11	INDUCTOR	4.7uH
L006	1-460-369-11	INDUCTOR	33uH
L007	1-460-359-11	INDUCTOR	4.7uH
* L701	1-481-642-11	INDUCTOR	10uH
		< LINE FILTER >	
LF701	1-457-539-11	COMMON MODE CHOKE COIL	
LF702	1-457-539-11	COMMON MODE CHOKE COIL	
		< TRANSISTOR >	
* Q001	6-552-490-01	TRANSISTOR	SCH1433-S-TL-H
* Q002	6-552-029-01	TRANSISTOR	MCH3377-S-TL-E
Q003	6-552-621-01	TRANSISTOR	SSM3K37MFV, L3SOF
Q073	6-552-621-01	TRANSISTOR	SSM3K37MFV, L3SOF
Q082	6-551-202-01	TRANSISTOR	LM6K1FS8T2R
* Q084	6-552-123-01	TRANSISTOR	ECH8652-S-TL-H
* Q085	6-552-123-01	TRANSISTOR	ECH8652-S-TL-H
Q206	6-551-202-01	TRANSISTOR	LM6K1FS8T2R
Q207	6-552-621-01	TRANSISTOR	SSM3K37MFV, L3SOF

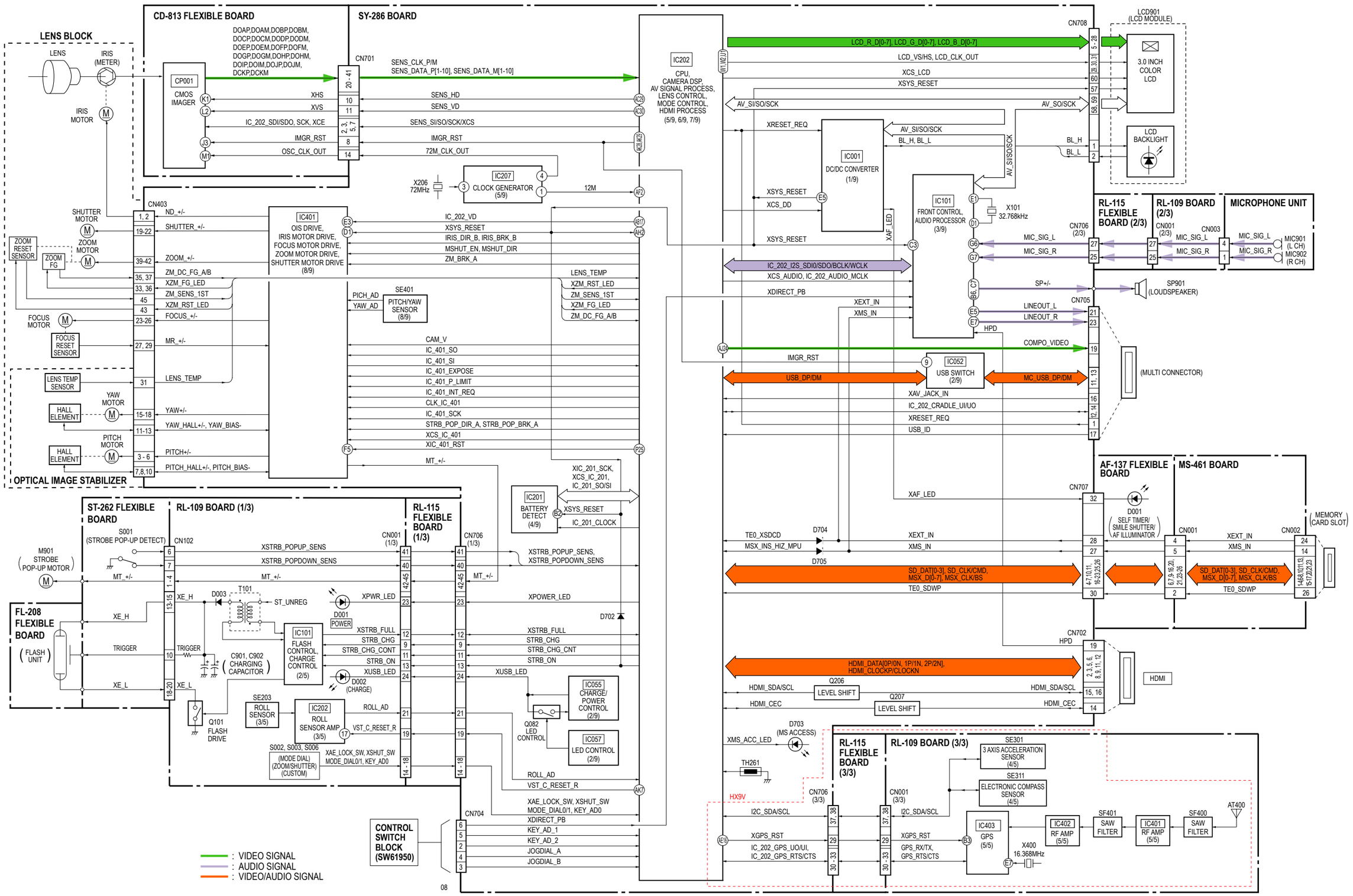
Ref. No.	Part No.	Description			
		< RESISTOR >			
R011	1-220-872-81	METAL CHIP	12	0.5%	1/16W
R042	1-240-718-91	METAL CHIP	100K	5%	1/20W
R043	1-240-729-91	METAL CHIP	1M	5%	1/20W
R044	1-240-731-91	METAL CHIP	1.5M	5%	1/20W
R051	1-240-729-91	METAL CHIP	1M	5%	1/20W
R056	1-208-911-11	METAL CHIP	10K	0.5%	1/16W
R064	1-218-955-11	METAL CHIP	1.5K	5%	1/16W
R068	1-240-830-11	METAL CHIP	100K	0.5%	1/20W
R087	1-240-733-91	METAL CHIP	2.2M	5%	1/20W
R088	1-240-695-91	METAL CHIP	1K	5%	1/20W
R093	1-240-718-91	METAL CHIP	100K	5%	1/20W
R095	1-240-695-91	METAL CHIP	1K	5%	1/20W
R096	1-240-726-91	METAL CHIP	470K	5%	1/20W
R097	1-240-726-91	METAL CHIP	470K	5%	1/20W
R098	1-240-672-11	METAL CHIP	10	5%	1/20W
R099	1-240-726-91	METAL CHIP	470K	5%	1/20W
R115	1-208-691-11	METAL CHIP	2.2K	0.5%	1/16W
R116	1-208-691-11	METAL CHIP	2.2K	0.5%	1/16W
R117	1-218-953-11	METAL CHIP	1K	5%	1/16W
R118	1-218-953-11	METAL CHIP	1K	5%	1/16W
R205	1-240-695-91	METAL CHIP	1K	5%	1/20W
R212	1-208-869-11	METAL CHIP	180	0.5%	1/16W
R215	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W
R216	1-208-861-81	METAL CHIP	82	0.5%	1/16W
R217	1-240-707-91	METAL CHIP	10K	5%	1/20W
R218	1-240-703-91	METAL CHIP	4.7K	5%	1/20W
R219	1-240-695-91	METAL CHIP	1K	5%	1/20W
R220	1-208-873-81	METAL CHIP	270	0.5%	1/16W
R221	1-240-703-91	METAL CHIP	4.7K	5%	1/20W
R222	1-240-712-91	METAL CHIP	27K	5%	1/20W
R227	1-218-935-11	METAL CHIP	33	5%	1/16W
R229	1-240-698-91	METAL CHIP	1.8K	5%	1/20W
R230	1-240-698-91	METAL CHIP	1.8K	5%	1/20W
R264	1-240-695-91	METAL CHIP	1K	5%	1/20W
R265	1-240-695-91	METAL CHIP	1K	5%	1/20W
R266	1-218-935-11	METAL CHIP	33	5%	1/16W
R272	1-240-681-91	METAL CHIP	68	5%	1/20W
R273	1-240-683-91	METAL CHIP	100	5%	1/20W
R279	1-240-679-91	METAL CHIP	47	5%	1/20W
R284	1-208-935-11	METAL CHIP	100K	0.5%	1/16W
R285	1-240-707-91	METAL CHIP	10K	5%	1/20W
R287	1-240-707-91	METAL CHIP	10K	5%	1/20W
R288	1-240-707-91	METAL CHIP	10K	5%	1/20W
R289	1-218-935-11	METAL CHIP	33	5%	1/16W
R290	1-240-714-91	METAL CHIP	47K	5%	1/20W
R291	1-208-943-11	METAL CHIP	220K	0.5%	1/16W
R292	1-208-943-11	METAL CHIP	220K	0.5%	1/16W
R294	1-218-935-11	METAL CHIP	33	5%	1/16W
R297	1-218-935-11	METAL CHIP	33	5%	1/16W
R298	1-218-935-11	METAL CHIP	33	5%	1/16W
R299	1-218-935-11	METAL CHIP	33	5%	1/16W
R300	1-218-935-11	METAL CHIP	33	5%	1/16W
R301	1-218-935-11	METAL CHIP	33	5%	1/16W
R302	1-218-945-11	METAL CHIP	220	5%	1/16W
R303	1-218-945-11	METAL CHIP	220	5%	1/16W
R305	1-218-945-11	METAL CHIP	220	5%	1/16W
R306	1-218-945-11	METAL CHIP	220	5%	1/16W

Ref. No.	Part No.	Description			
R309	1-240-703-91	METAL CHIP	4.7K	5%	1/20W
R310	1-240-703-91	METAL CHIP	4.7K	5%	1/20W
R374	1-208-668-11	METAL CHIP	240	0.5%	1/16W
* R408	1-248-350-11	RES-CHIP	1.5	1%	1/3W
R418	1-208-711-11	METAL CHIP	15K	0.5%	1/16W
R423	1-240-808-11	METAL CHIP	10K	0.5%	1/20W
R424	1-240-808-11	METAL CHIP	10K	0.5%	1/20W
R425	1-240-808-11	METAL CHIP	10K	0.5%	1/20W
R426	1-240-808-11	METAL CHIP	10K	0.5%	1/20W
R427	1-240-808-11	METAL CHIP	10K	0.5%	1/20W
R428	1-240-808-11	METAL CHIP	10K	0.5%	1/20W
R431	1-218-946-11	METAL CHIP	270	5%	1/16W
R438	1-218-946-11	METAL CHIP	270	5%	1/16W
R439	1-218-946-11	METAL CHIP	270	5%	1/16W
R457	1-240-707-91	METAL CHIP	10K	5%	1/20W
R458	1-240-711-91	METAL CHIP	22K	5%	1/20W
R460	1-240-707-91	METAL CHIP	10K	5%	1/20W
R461	1-240-711-91	METAL CHIP	22K	5%	1/20W
* R463	1-245-671-11	METAL CHIP	39K	0.5%	1/20W
* R464	1-245-671-11	METAL CHIP	39K	0.5%	1/20W
R465	1-240-794-11	METAL CHIP	2.7K	0.5%	1/20W
R466	1-240-794-11	METAL CHIP	2.7K	0.5%	1/20W
R467	1-240-804-11	METAL CHIP	6.8K	0.5%	1/20W
R468	1-240-804-11	METAL CHIP	6.8K	0.5%	1/20W
R471	1-240-808-11	METAL CHIP	10K	0.5%	1/20W
R472	1-208-889-11	METAL CHIP	1.2K	0.5%	1/16W
R473	1-218-973-11	METAL CHIP	47K	5%	1/16W
R709	1-240-687-91	METAL CHIP	220	5%	1/20W
R715	1-240-695-91	METAL CHIP	1K	5%	1/20W
		< COMPOSITION CIRCUIT BLOCK >			
RB001	1-234-381-11	RES, NETWORK	100K (1005X4)		
RB701	1-234-376-11	RES, NETWORK	2.2K (1005X4)		
		< SENSOR >			
* SE401	1-489-735-11	SENSOR, ANGULAR VELOCITY (PITCH/YAW)			
		< THERMISTOR >			
TH261	1-805-194-21	THERMISTOR, NTC (SMD)			
		< VIBRATOR >			
X101	1-781-525-11	VIBRATOR, CRYSTAL (32.768KHz)			
* X206	1-487-897-21	SILICON OSCILLATOR (72MHZ)			
	1-489-492-11	SWITCH BLOCK, CONTROL (SW61950)			
		**********			

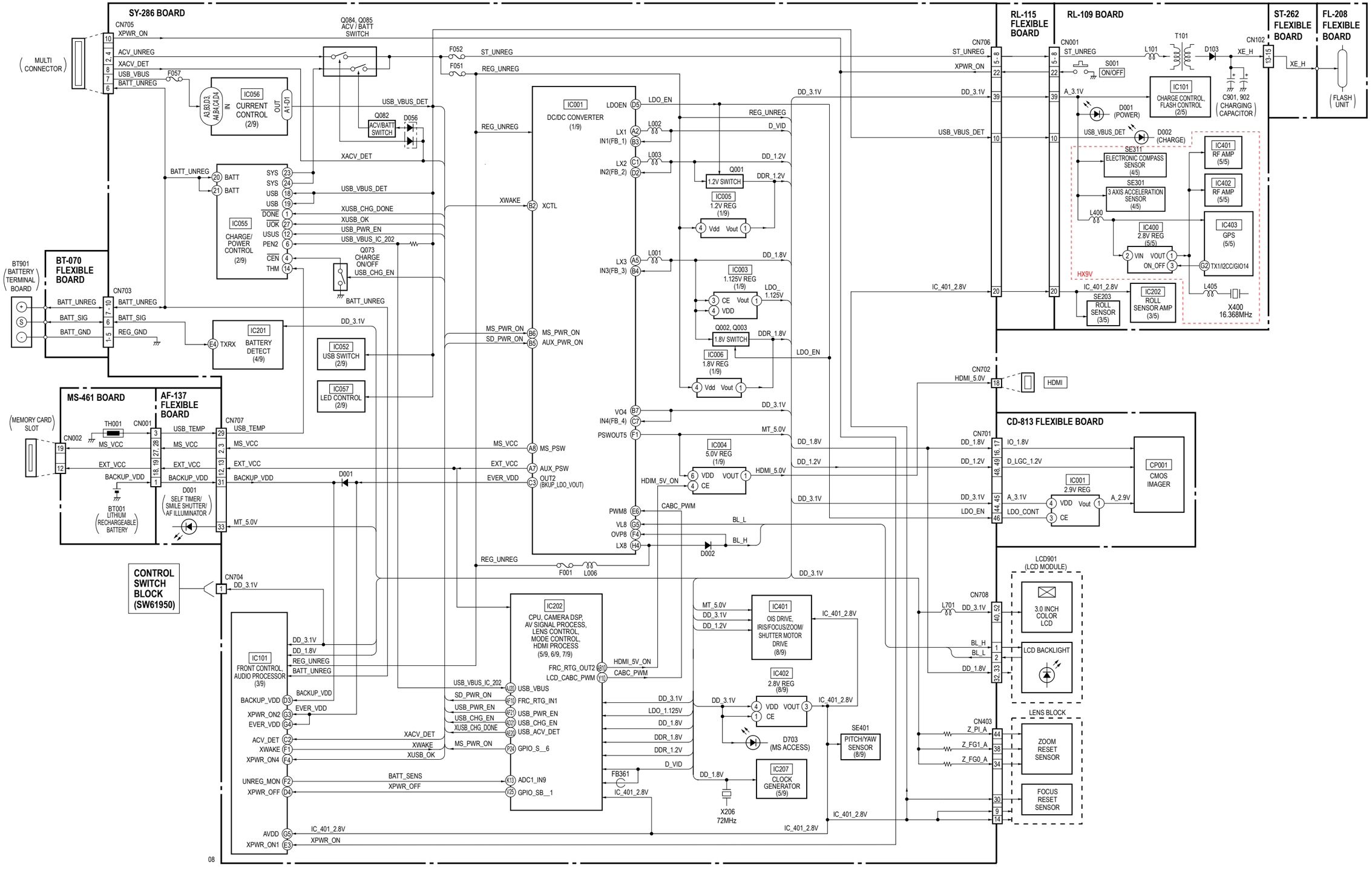
4. BLOCK DIAGRAMS

4-1. OVERALL BLOCK DIAGRAM

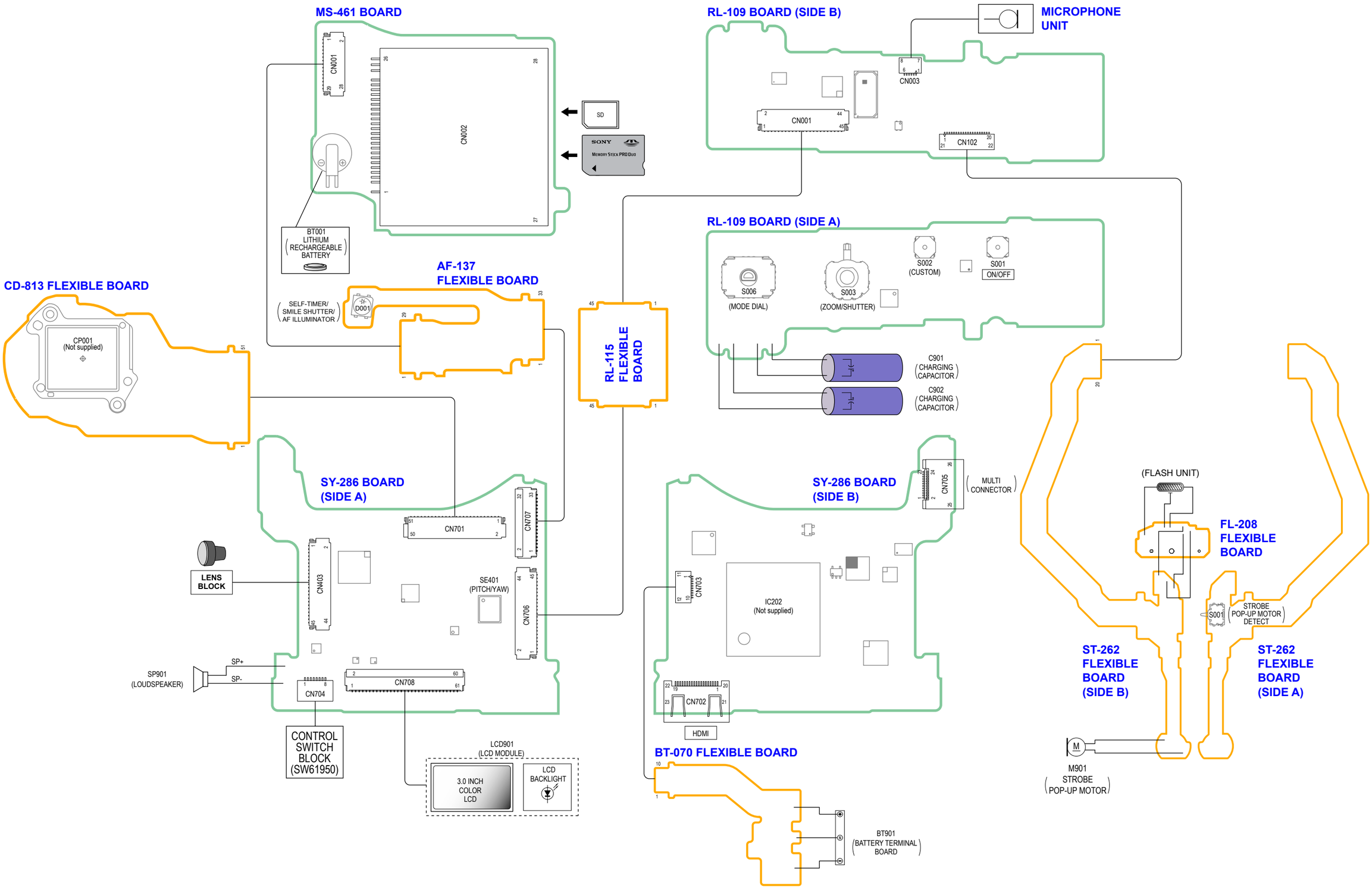
( ) : Number in parenthesis ( ) indicates the division number of schematic diagram where the component is located.



4-2. POWER BLOCK DIAGRAM ( ) : Number in parenthesis ( ) indicates the division number of schematic diagram where the component is located.



5. FRAME SCHEMATIC DIAGRAMS



6. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

– ENGLISH –

THIS NOTE IS COMMON FOR SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS.
(In addition to this, the necessary note is printed in each block.)

For Schematic Diagrams

- All capacitors are in μF unless otherwise noted. pF : μμF. 50 V or less are not indicated except for electrolytics and tantalums.
- Chip resistors are 1/10 W unless otherwise noted.
  kΩ=1000 Ω, MΩ=1000 kΩ.
- Caution when replacing chip parts.
  New parts must be attached after removal of chip.
  Be careful not to heat the minus side of tantalum capacitor, Because it is damaged by the heat.
- Some chip part will be indicated as follows.
  Example C541 L452
  22U 10UH
  TA A 2520
  Kinds of capacitor / Case size / External dimensions (mm)
- Constants of resistors, capacitors, ICs and etc with XX indicate that they are not used.
  In such cases, the unused circuits may be indicated.
- Parts with ★ differ according to the model/destination.
  Refer to the mount table for each function.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- Signal name
  XEDIT → $\overline{\text{EDIT}}$ PB/XREC → PB/$\overline{\text{REC}}$
- : non flammable resistor
- : fusible resistor
- : panel designation
- : B+ Line
- : B– Line
- : IN/OUT direction of (+, –) B LINE.
- : adjustment for repair.

For Printed Wiring Boards

- : Uses unleaded solder.
- : Circuit board
- : Flexible board
  Pattern from the side which enables seeing.
  : pattern of the rear side
  (The other layers' patterns are not indicated)
- Through hole is omitted.
- There are a few cases that the part printed on diagram isn't mounted in this model.
- : panel designation

- Chip parts.
  Transistor Diode

Precautions for Replacement of Imager

- If the imager has been replaced, carry out all the adjustments for the camera section.
- As the imager may be damaged by static electricity from its structure, handle it carefully like for the MOS IC.
  In addition, ensure that the receiver is not covered with dusts nor exposed to strong light.

When indicating parts by reference number, please include the board name.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

– JAPANESE –

回路図，プリント図共通ノート
（他に必要なノートは各セクションに記載しています）

回路図ノート

- ケミコン，タンタルを除くコンデンサで，耐圧50V以下のものはその耐圧を省略。単位はすべてμF(pはpF)。
- チップ抵抗で指示のないものは，1/10W以下。
  kΩ＝1000Ω，MΩ＝1000kΩ
- チップ部品交換時の注意
  取り外した部品は再使用せず，未使用の部品をご使用ください。
  タンタルコンデンサのマイナス側は熱に弱いため注意してください。
- チップ部品には下記のように表示したものがあります。
  例 C541 L452
  22U 10UH
  TA A 2520
  種類 / ケースサイズ / 外形寸法(mm)
- 抵抗，コンデンサ，ICなど定数にXXがあるものは，使用していない事を示しています。このため，使用していない回路が記載されている事があります。
- ★印のある部品は，機種などにより異なりますので機能別マウント一覧表を参照してください。
- 可変抵抗と半固定抵抗で，B特性の表示を省略。
- 信号名表記について，下記のような場合があります。
  XEDIT → $\overline{\text{EDIT}}$ PB/XREC → PB/$\overline{\text{REC}}$
- は不燃性抵抗。
- はヒューズ抵抗。
- はパネル表示名称。
- はB+ライン。
- はB−ライン。
- はBライン(+，−)の入出力方向を示す。
- は調整名称。

プリント図ノート

- ：無鉛半田を使用しています。
- ：基板
  ：フレキシブル配線板
  見ている面側のパターン。
  ：裏側のパターン
  (他のパターンについては表示されていません)
- スルーホールは省略。
- プリント図には，本機で使用していない部品が記載されている場合があります。
- はパネル表示名称。

- Chip parts.
  Transistor Diode

イメージャ交換時の注意

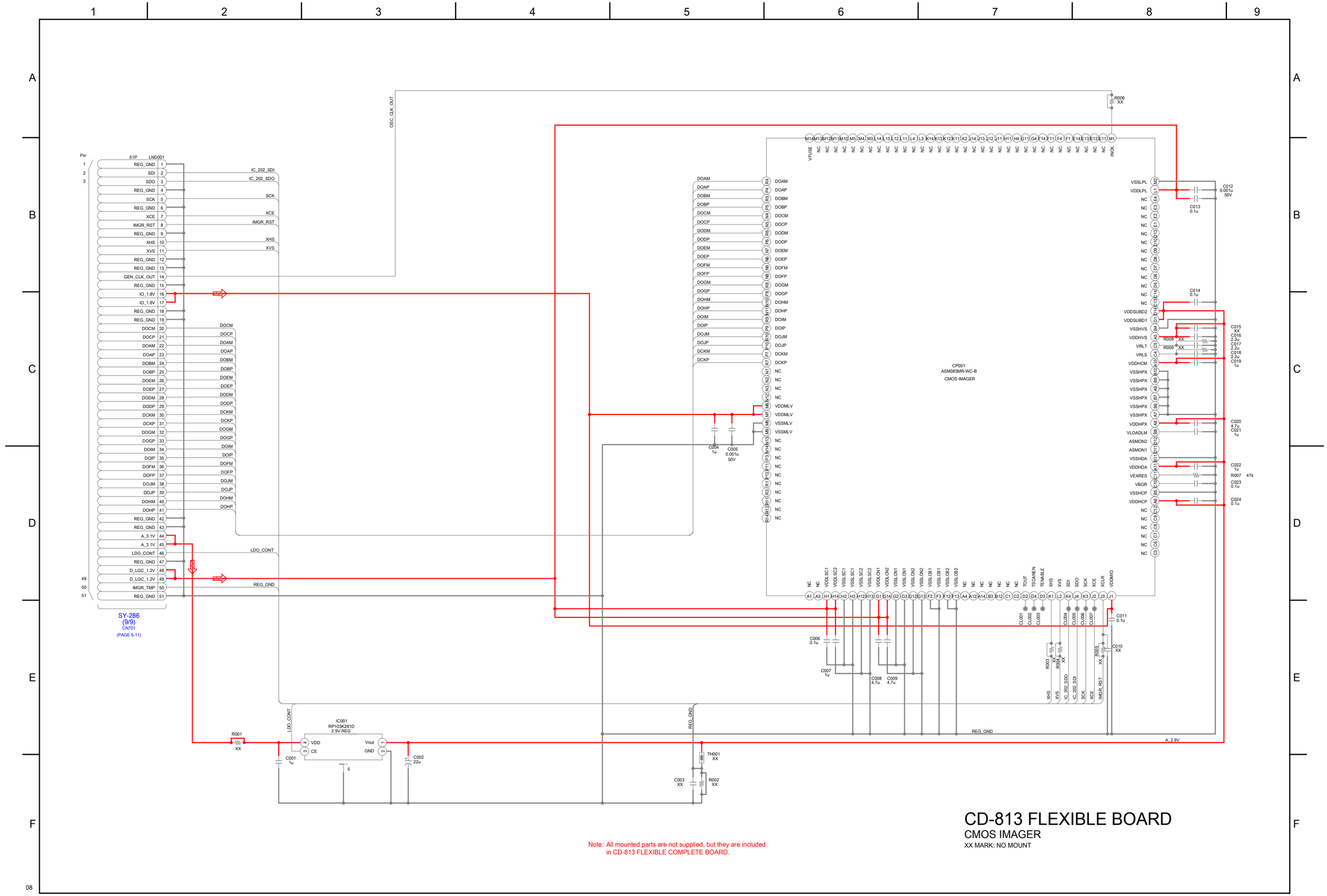
- イメージャを交換した場合は，カメラ部の全調整を行ってください。
- イメージャは構造上，静電気により破壊される恐れがあるため，MOS ICと同様に注意して取り扱ってください。
  また，受光部にはゴミの付着，および強い光がはいることのないように注意してください。

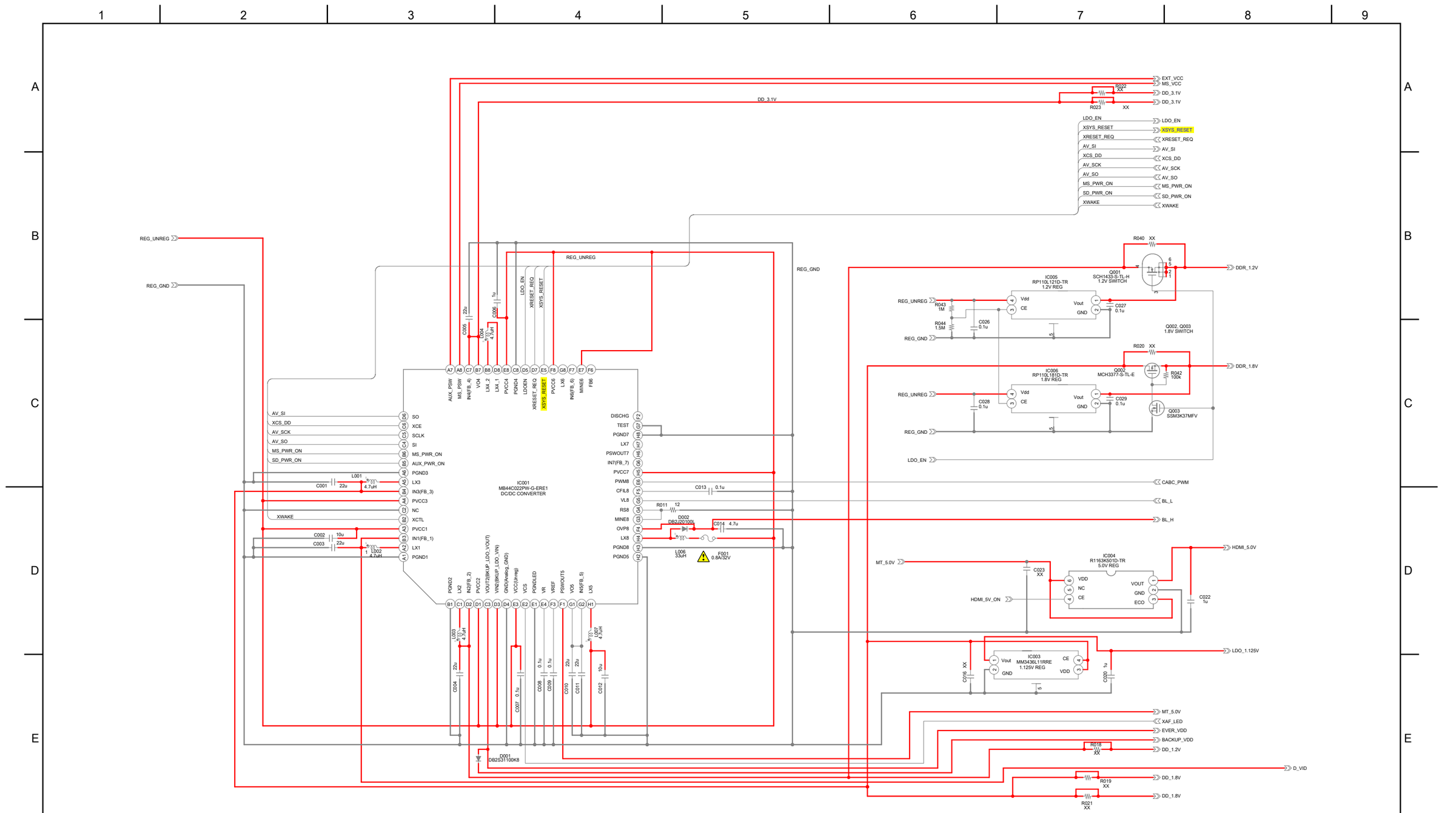
お願い

図面番号で部品を指定するときは基板名又はブロックを併せて指定してください。

⚠印の部品，または⚠印付の点線で囲まれた部品は，安全性を維持するために，重要な部品です。
従って交換時は，必ず指定の部品を使用してください。

6-1. SCHEMATIC DIAGRAMS

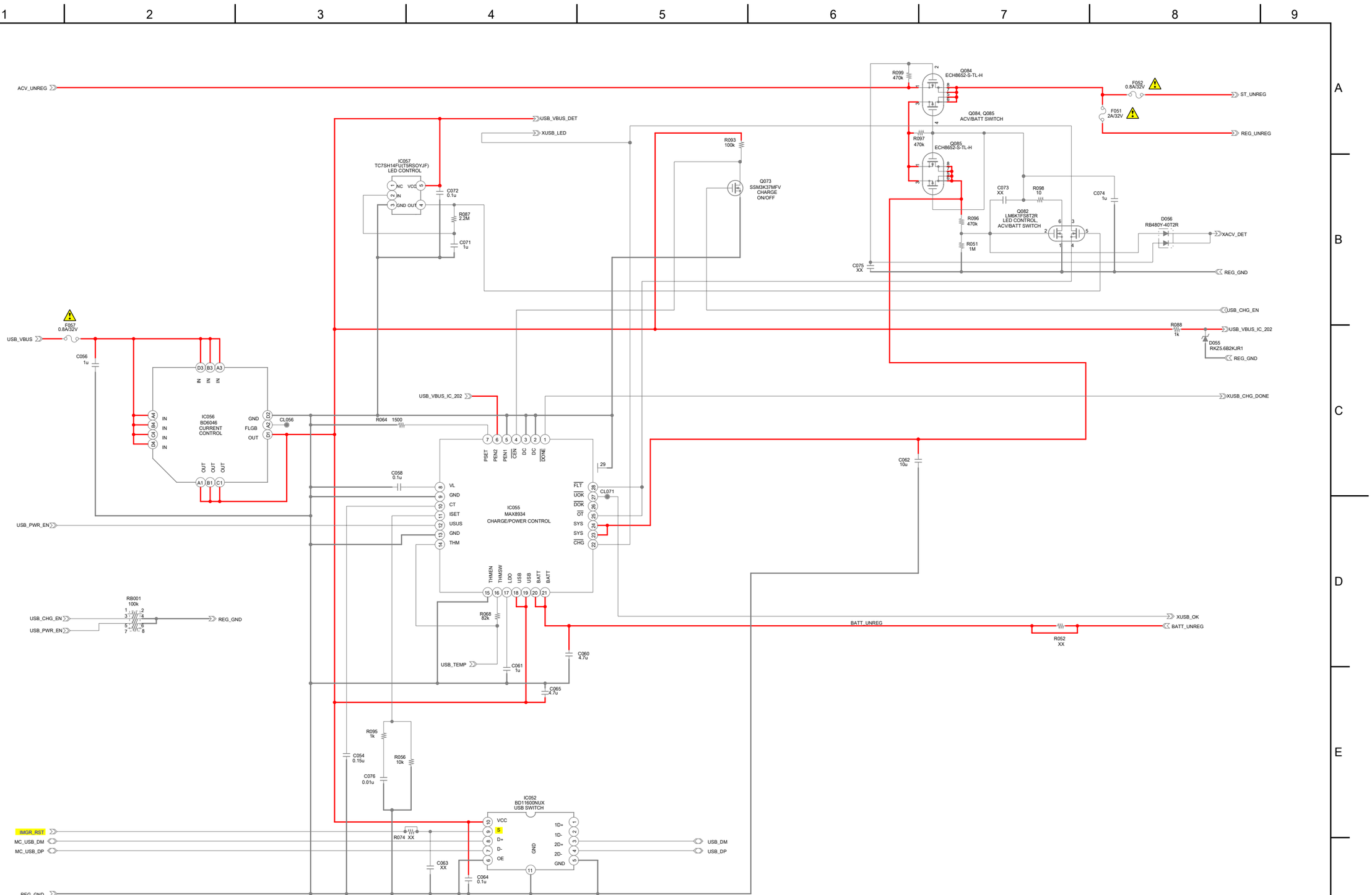




SY-286 BOARD (1/9)

DC/DC CONVERTER

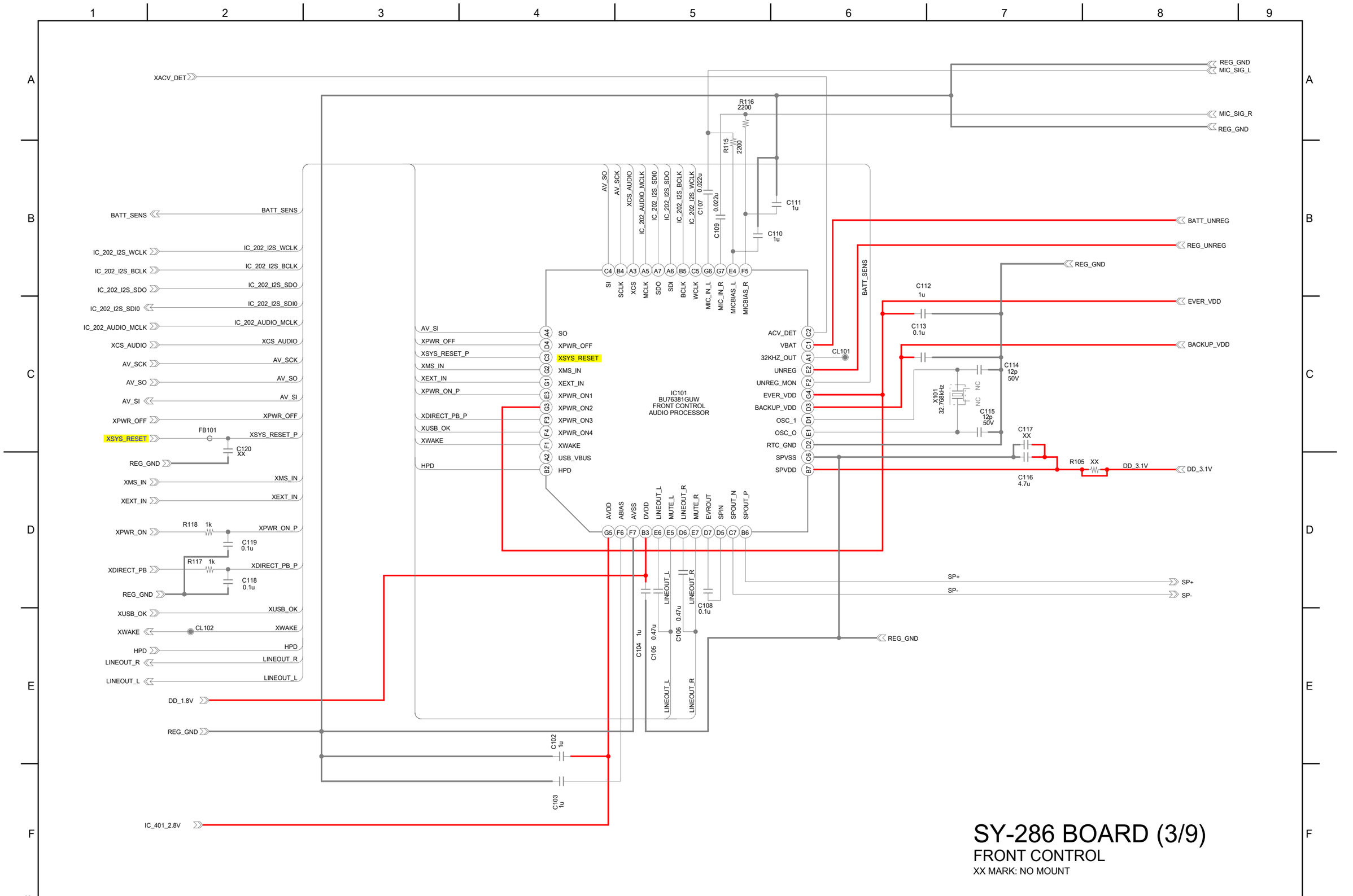
XX MARK: NO MOUNT

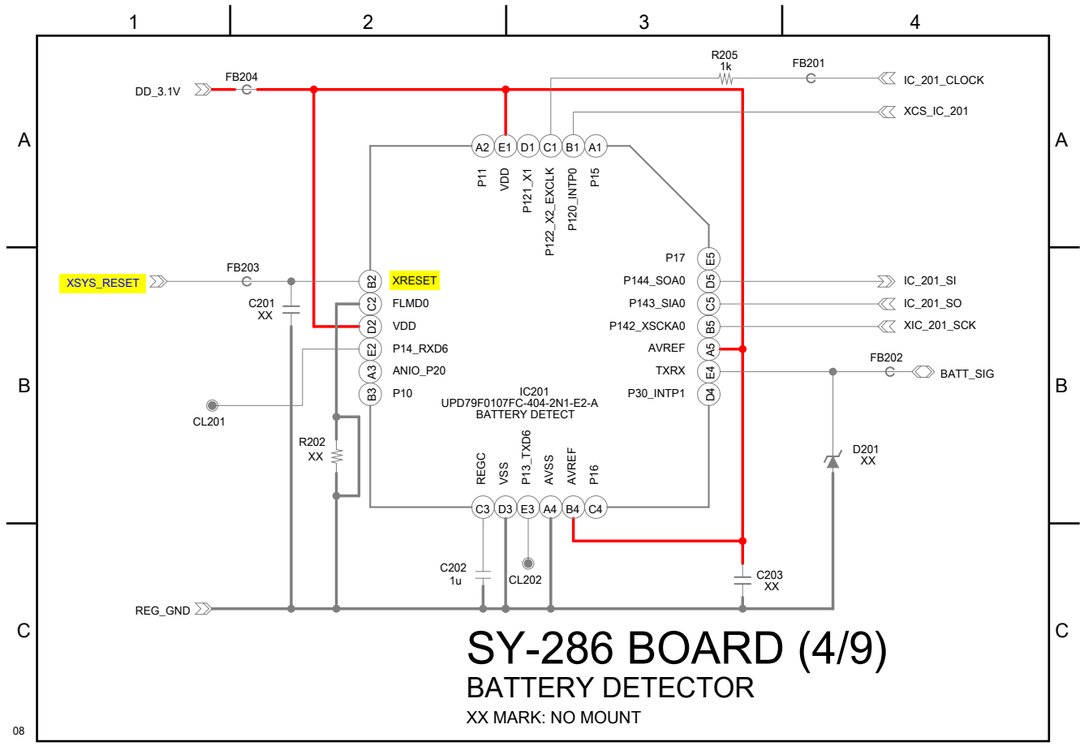


SY-286 BOARD (2/9)

USB SWITCH,
CHARGE/POWER CONTROL

XX MARK: NO MOUNT

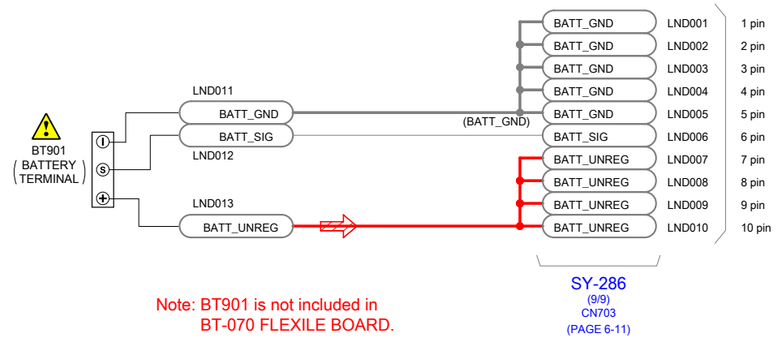

XACV_DET
REG_GND
MIC_SIG_L
MIC_SIG_R
REG_GND
R116 2200
R115 2200
C111 1u
C110 1u
C107 0.022u
C109 0.022u
AV_SO
AV_SCK
XCS_AUDIO
IC_202_AUDIO_MCLK
IC_202_I2S_SDI0
IC_202_I2S_SDO
IC_202_I2S_BCLK
IC_202_I2S_WCLK
BATT_SENS
IC_202_I2S_WCLK
IC_202_I2S_BCLK
IC_202_I2S_SDO
IC_202_I2S_SDI0
IC_202_AUDIO_MCLK
XCS_AUDIO
AV_SCK
AV_SO
AV_SI
XPWR_OFF
XSYS_RESET
FB101
C120 XX
XSYS_RESET_P
REG_GND
XMS_IN
XEXT_IN
XPWR_ON
R118 1k
C119 0.1u
XPWR_ON_P
XDIRECT_PB
R117 1k
C118 0.1u
XDIRECT_PB_P
REG_GND
XUSB_OK
XWAKE
CL102
HPD
LINEOUT_R
LINEOUT_L
DD_1.8V
REG_GND
IC_401_2.8V
C4 B4 A3 A5 A7 A6 B5 C5 G6 G7 E4 F5
SI SCLK XCS MCLK SDO SDI BCLK WCLK MIC_IN_L MIC_IN_R MICBIAS_L MICBIAS_R
AV_SI
XPWR_OFF
XSYS_RESET_P
XMS_IN
XEXT_IN
XPWR_ON_P
XDIRECT_PB_P
XUSB_OK
XWAKE
HPD
A4 SO
D4 XPWR_OFF
C3 XSYS_RESET
G2 XMS_IN
G1 XEXT_IN
E3 XPWR_ON1
G3 XPWR_ON2
F3 XPWR_ON3
F4 XPWR_ON4
F1 XWAKE
A2 XUSB_VBUS
B2 HPD
IC101
BU76381GUW
FRONT CONTROL
AUDIO PROCESSOR
ACV_DET C2
VBAT C1
32KHZ_OUT A1
UNREG E2
UNREG_MON F2
EVER_VDD G4
BACKUP_VDD D3
OSC_1 D1
OSC_O E1
RTC_GND D2
SPVSS C6
SPVDD B7
CL101
BATT_SENS
BATT_UNREG
REG_UNREG
REG_GND
C112 1u
EVER_VDD
C113 0.1u
BACKUP_VDD
C114 12p 50V
X101 32.768kHz
NC NC
C115 12p 50V
C117 XX
R105 XX
DD_3.1V
DD_3.1V
C116 4.7u
G5 F6 F7 B3 E6 E5 D6 E7 D7 D5 C7 B6
AVDD ABIAS AVSS DVDD LINEOUT_L MUTE_L LINEOUT_R MUTE_R EVROUT SPIN SPOUT_N SPOUT_P
SP+
SP-
SP+
SP-
C108 0.1u
LINEOUT_L
LINEOUT_R
C104 1u
C105 0.47u
C106 0.47u
REG_GND
C102 1u
C103 1u
SY-286 BOARD (3/9)
FRONT CONTROL
XX MARK: NO MOUNT



SY-286 BOARD (4/9)

BATTERY DETECTOR

XX MARK: NO MOUNT

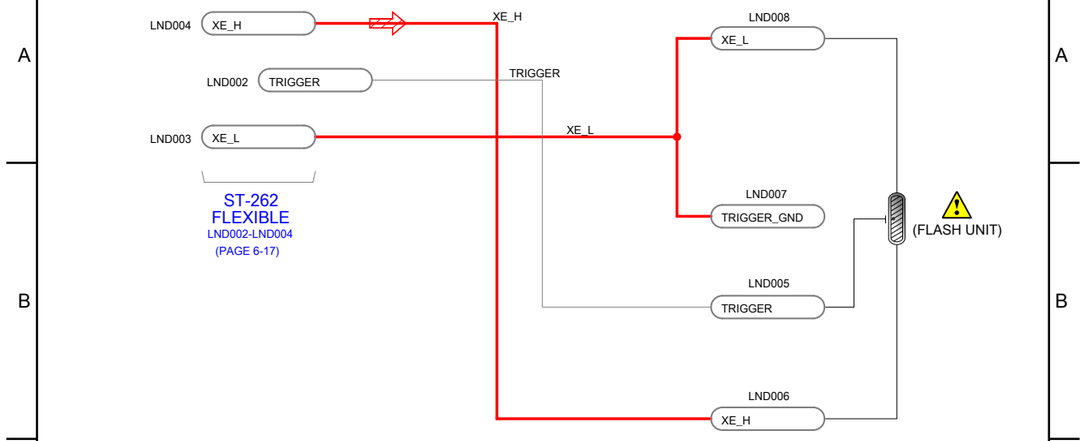


Note: BT901 is not included in BT-070 FLEXILE BOARD.

BT-070 FLEXIBLE BOARD

BATTERY TERMINAL

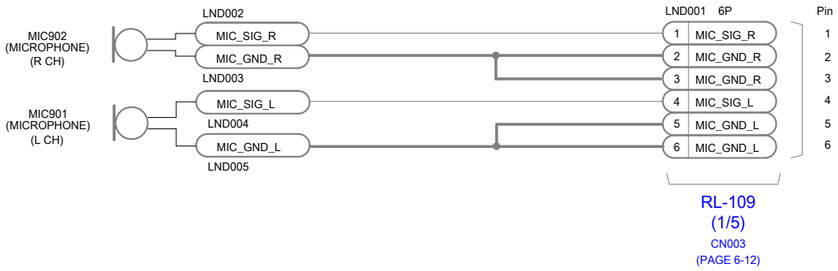
(PRINTED WIRING BOARD is omitted.)



Note: FL-208 FLEXIBLE BOARD is not supplied, but this is included in STROBOSCOPE BLOCK ASSY (950).

FL-208 FLEXIBLE BOARD

FLASH UNIT TERMINAL



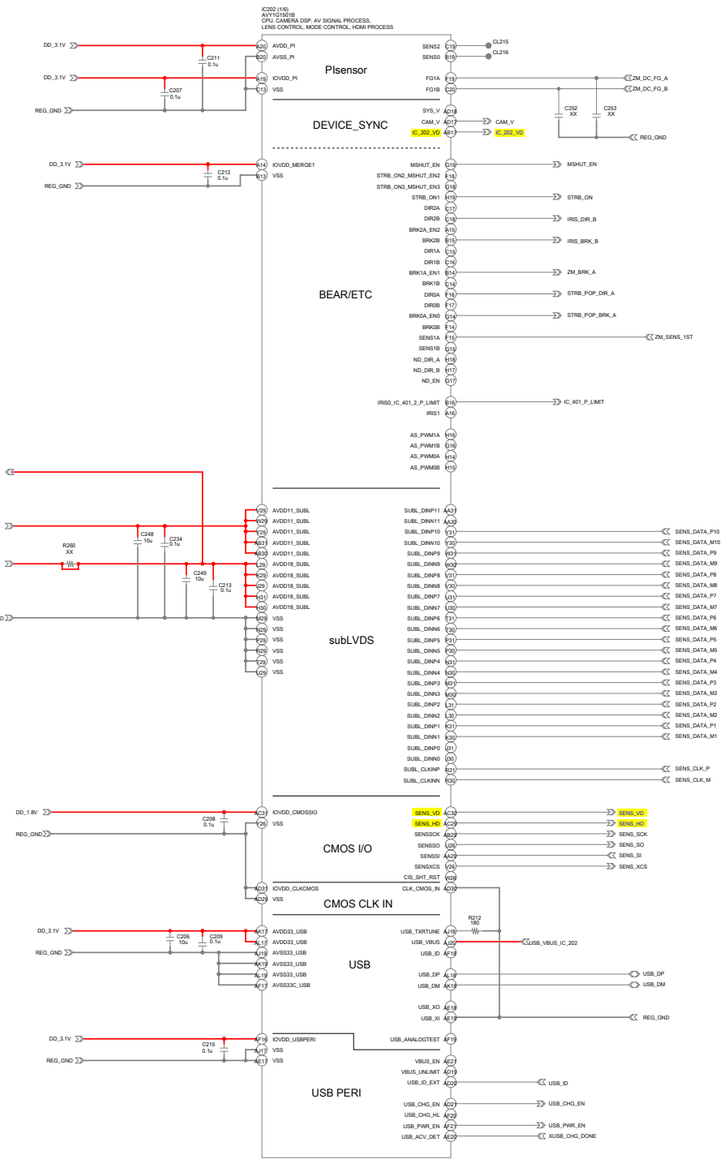
Note: MIC901 and MIC902 are not included in MICROPHONE UNIT.

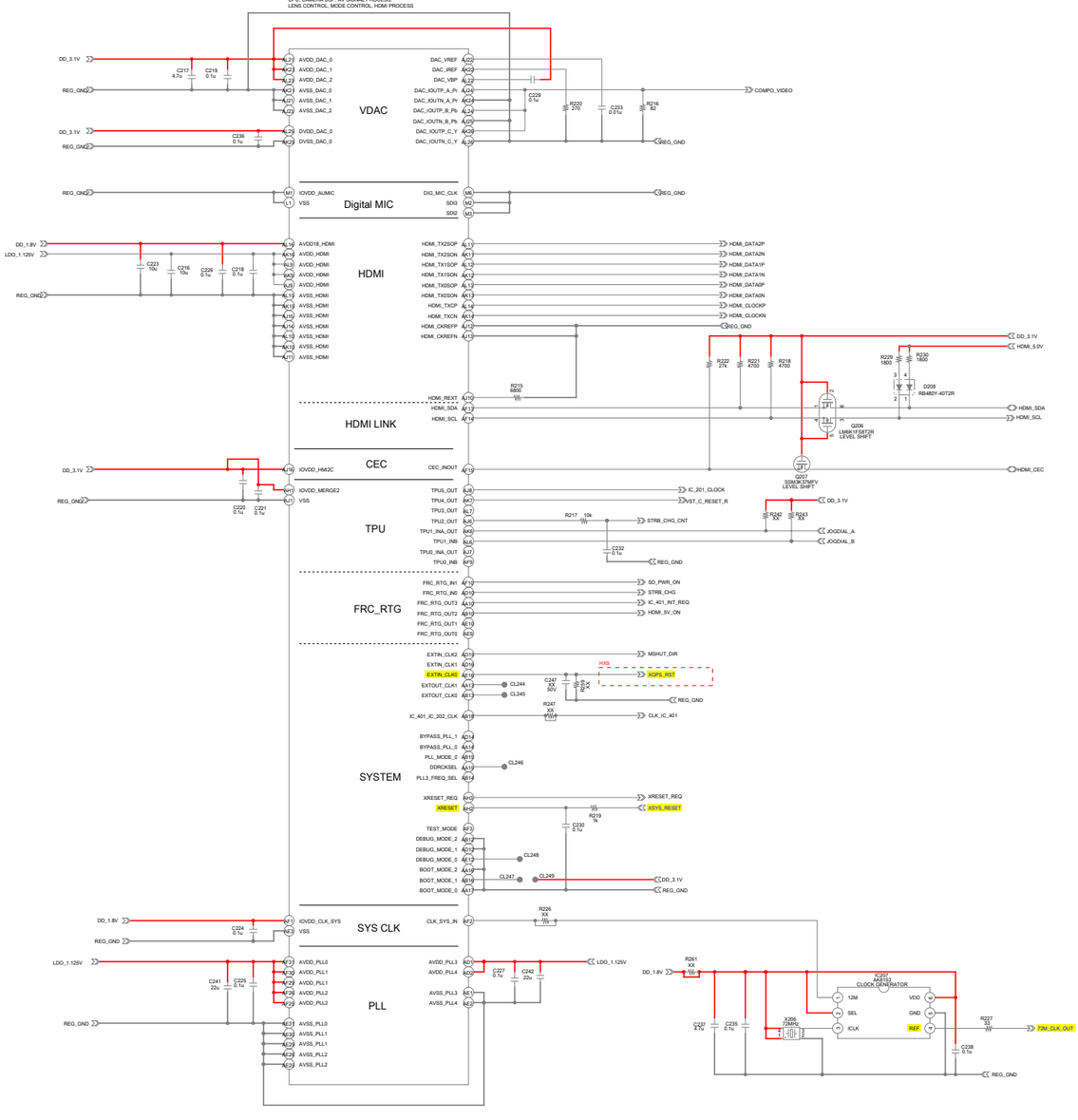
MICROPHONE UNIT

MICROPHONE TERMINAL

(PRINTED WIRING BOARD is omitted.)

Note: IC202 is not supplied, but this is included in SY-286 COMPLETE BOARD (SERVICE).



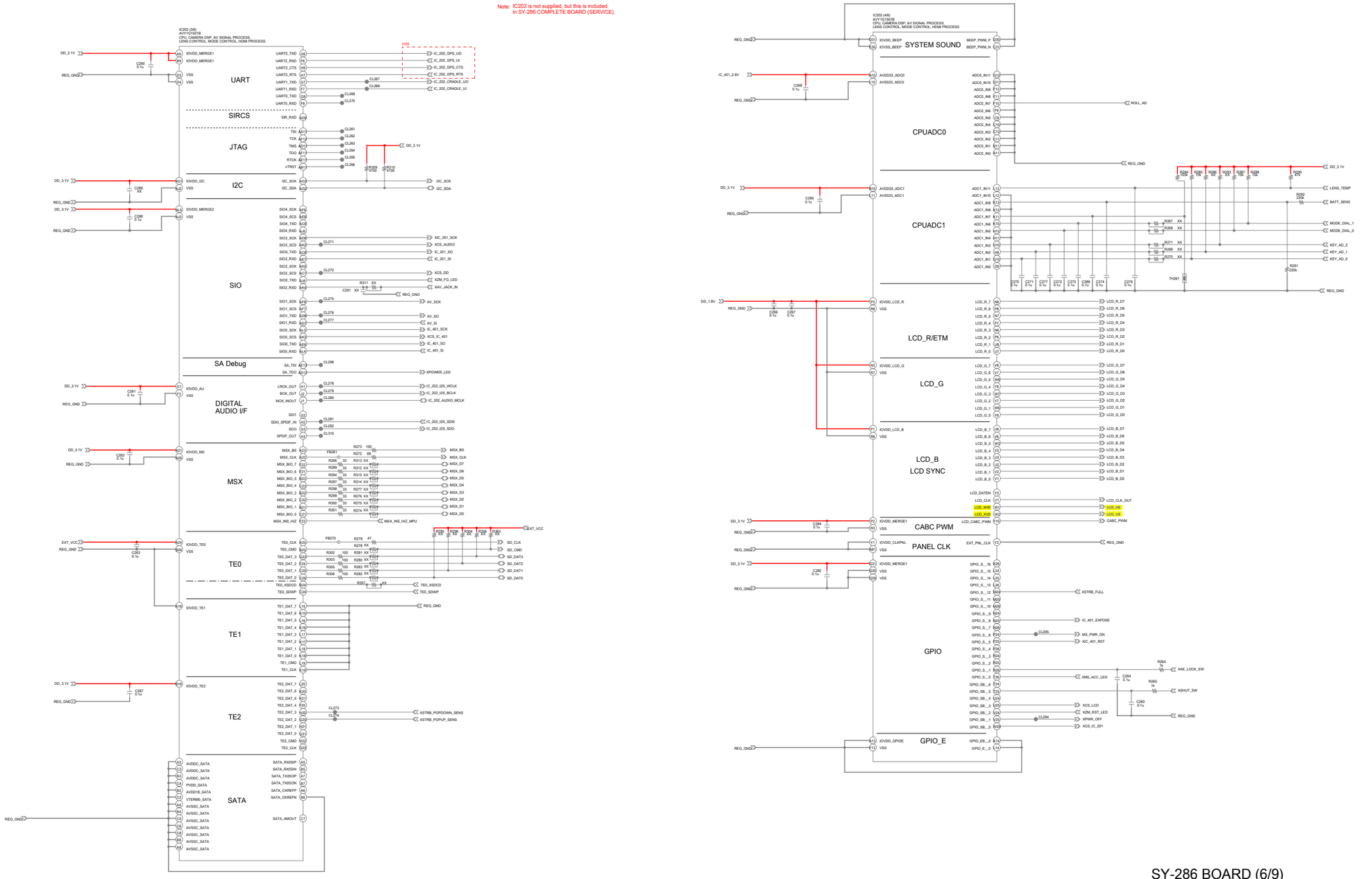


SY-286 BOARD (5/9)

CPU, CAMERA DSP, AV SIGNAL PROCESS,
LENS CONTROL, MODE CONTROL, HDMI PROCESS
(1/3)

XX MARK: NO MOUNT

Note: IC202 is not supplied, but this is included in SY-286 COMPLETE BOARD (SERVICE).

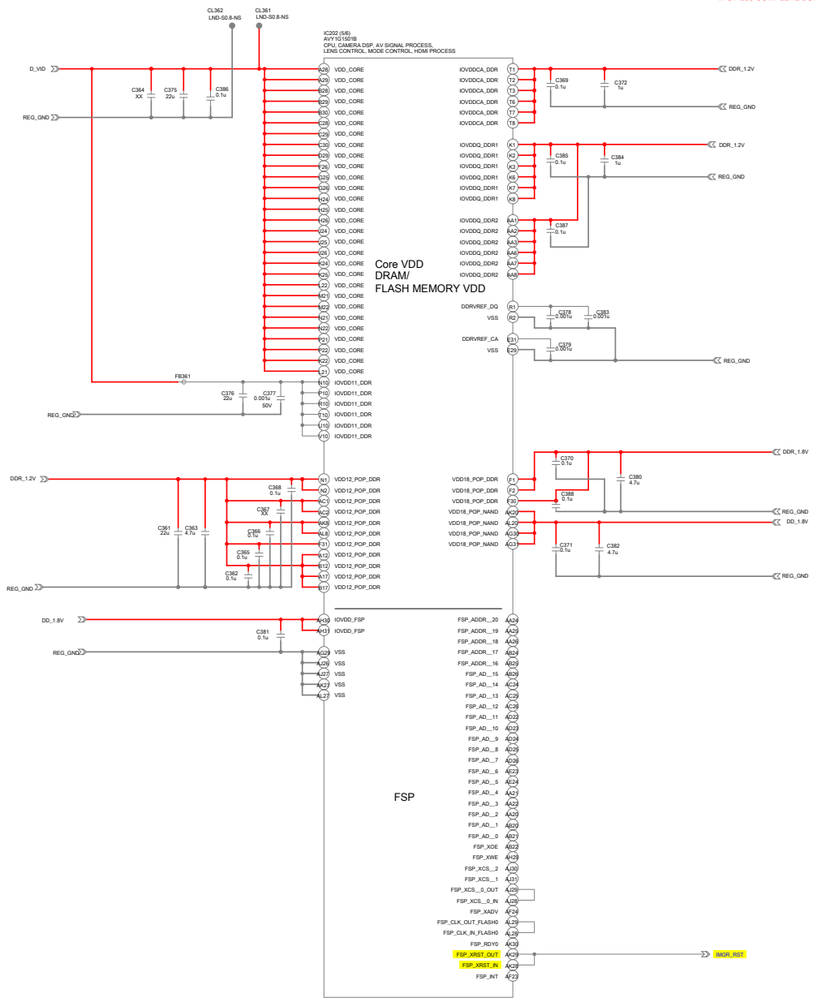


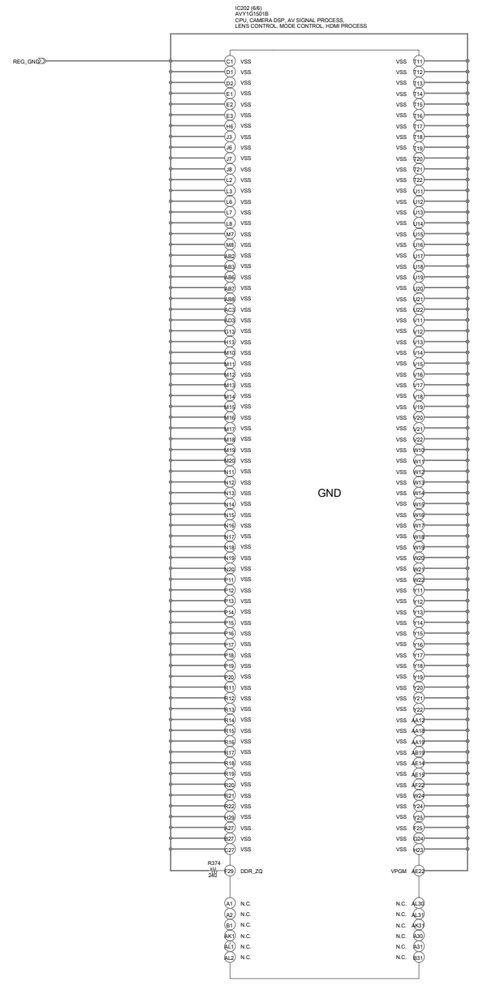
SY-286 BOARD (6/9)

CPU, CAMERA DSP, AV SIGNAL PROCESS,
LENS CONTROL, MODE CONTROL, HDMI PROCESS
(2/3)

XX MARK: NO MOUNT

Note: IC202 is not supplied, but this is included in SY-286 COMPLETE BOARD (SERVICE).

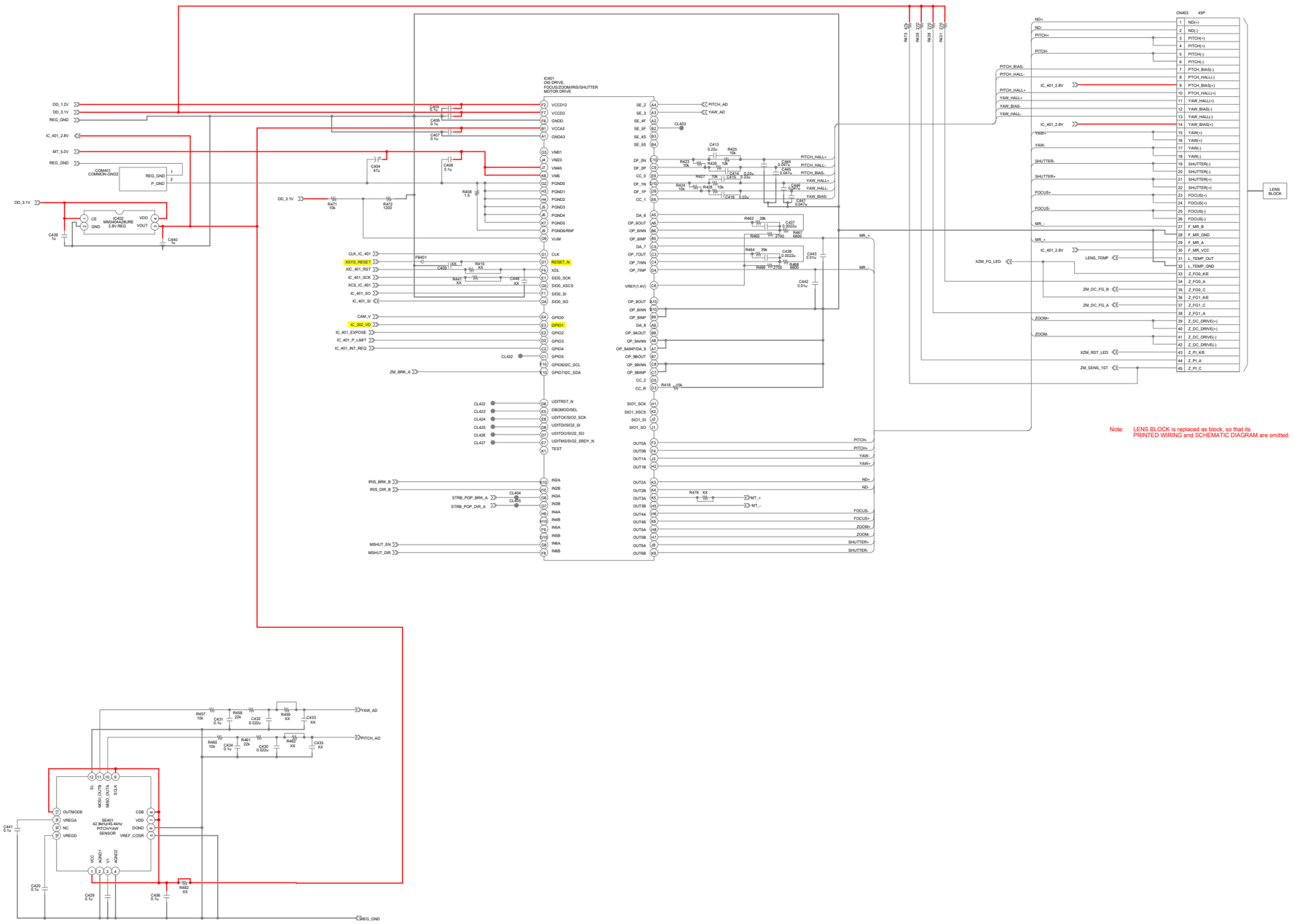




SY-286 BOARD (7/9)

CPU, CAMERA DSP, AV SIGNAL PROCESS, LENS CONTROL, MODE CONTROL, HDMI PROCESS (3/3)

XX MARK: NO MOUNT

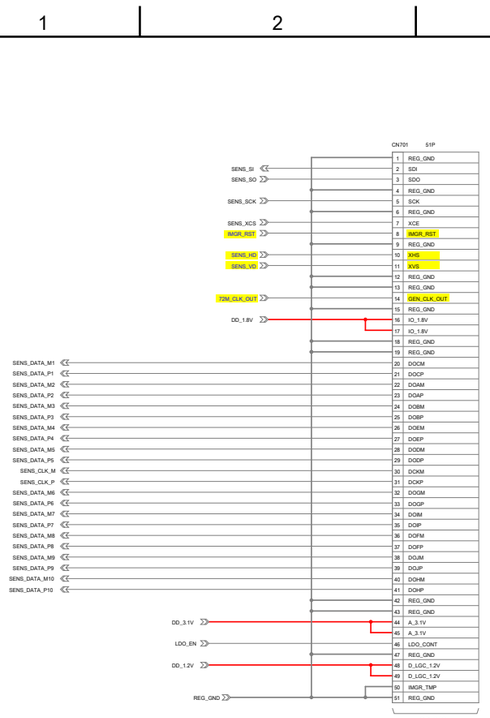


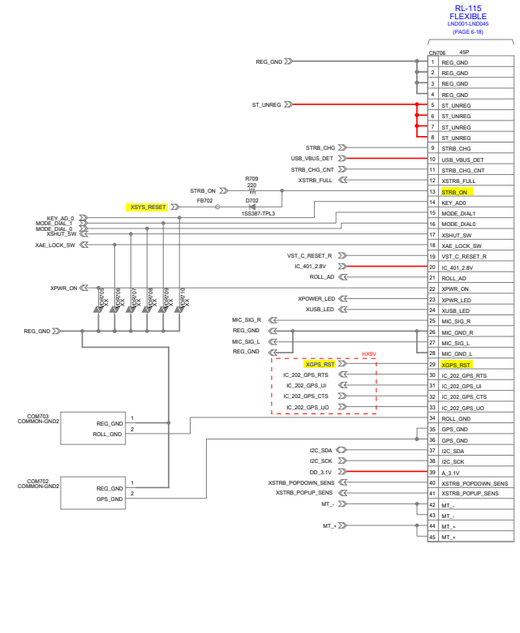
Note: LENS BLOCK is replaced as block, so that its PRINTED WIRING and SCHEMATIC DIAGRAM are omitted.

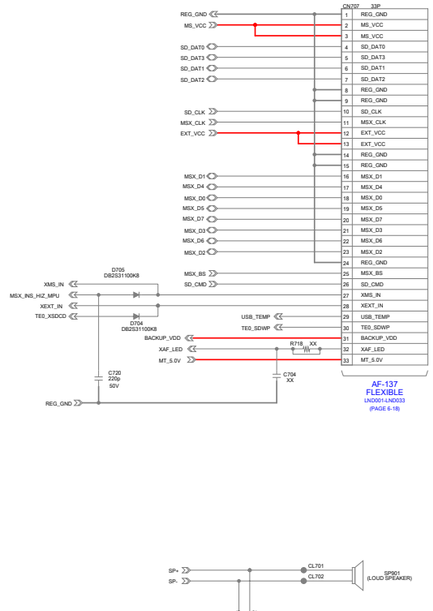
SY-286 BOARD (8/9)

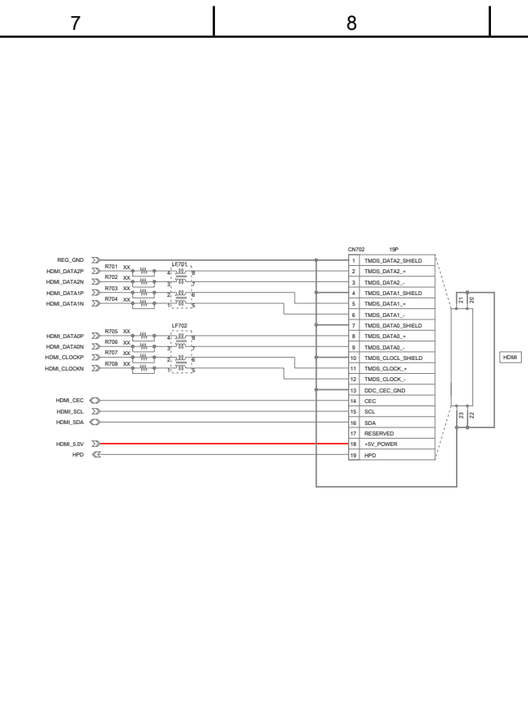
OIS DRIVE, FOUCS/ZOOM/IRIS/SHUTTER MOTOR DRIVE

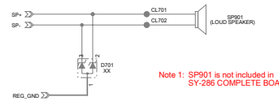
XX MARK: NO MOUNT



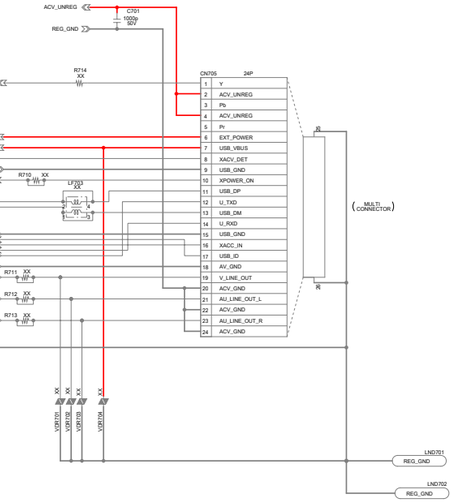


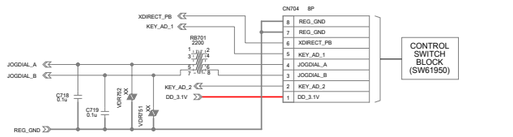




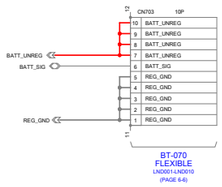


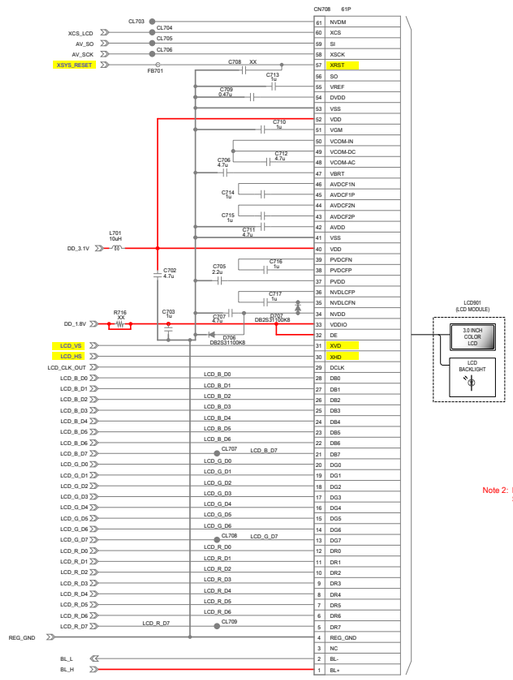
Note 1: SP901 is not included in SY-286 COMPLETE BOARD (SERVICE).



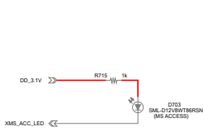


Note3: CONTROL SWITCH BLOCK (SW61950) is replaced as block, so that SCHEMATIC DIAGRAM and PRINTED WIRING BOARD are omitted.





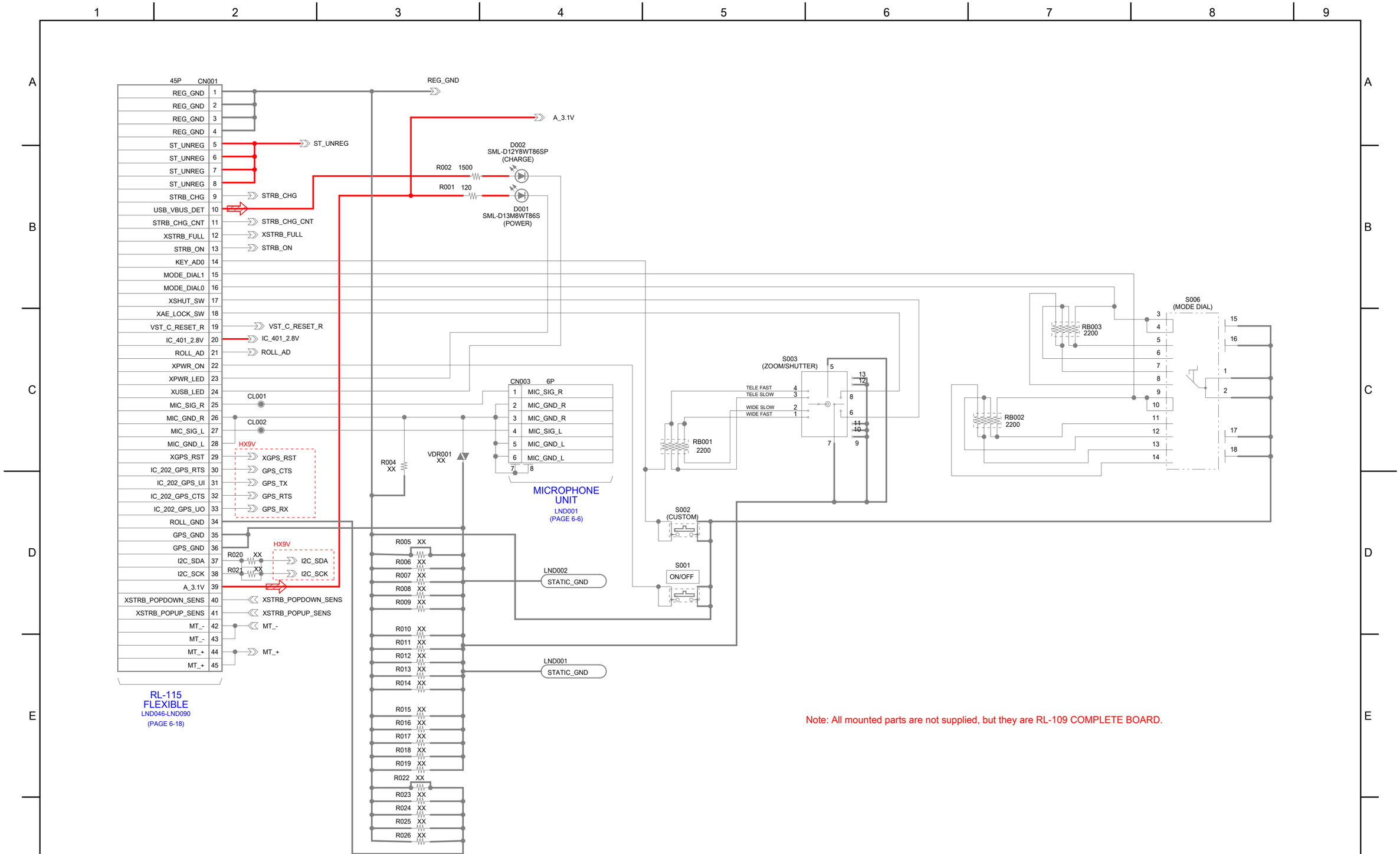
Note 2: LCD901 is not included in SY-286 COMPLETE BOARD (SERVICE).



SY-286 BOARD (9/9)

CONNECTORS

XX MARK: NO MOUNT

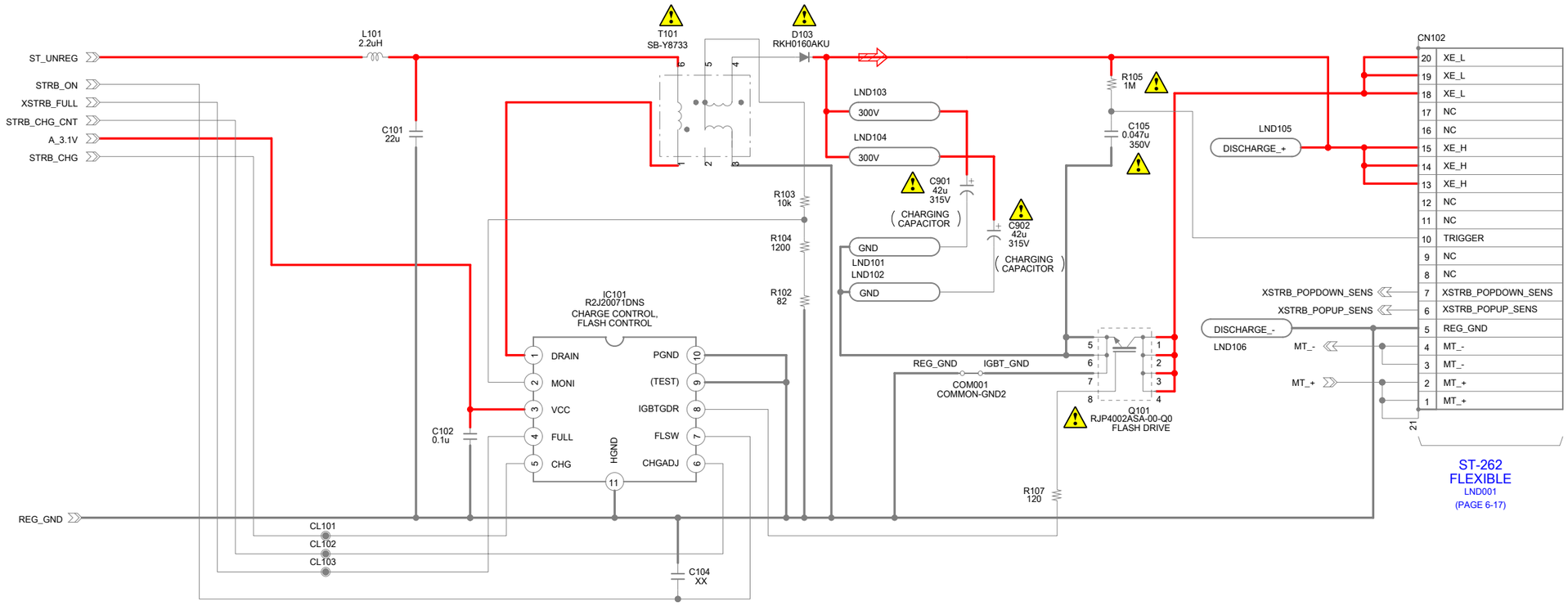


Note: All mounted parts are not supplied, but they are RL-109 COMPLETE BOARD.

RL-109 BOARD (1/5)

CONTROL KEY

XX MARK: NO MOUNT



Note 1: All mounted parts are not supplied, but they are RL-109 COMPLETE BOARD.

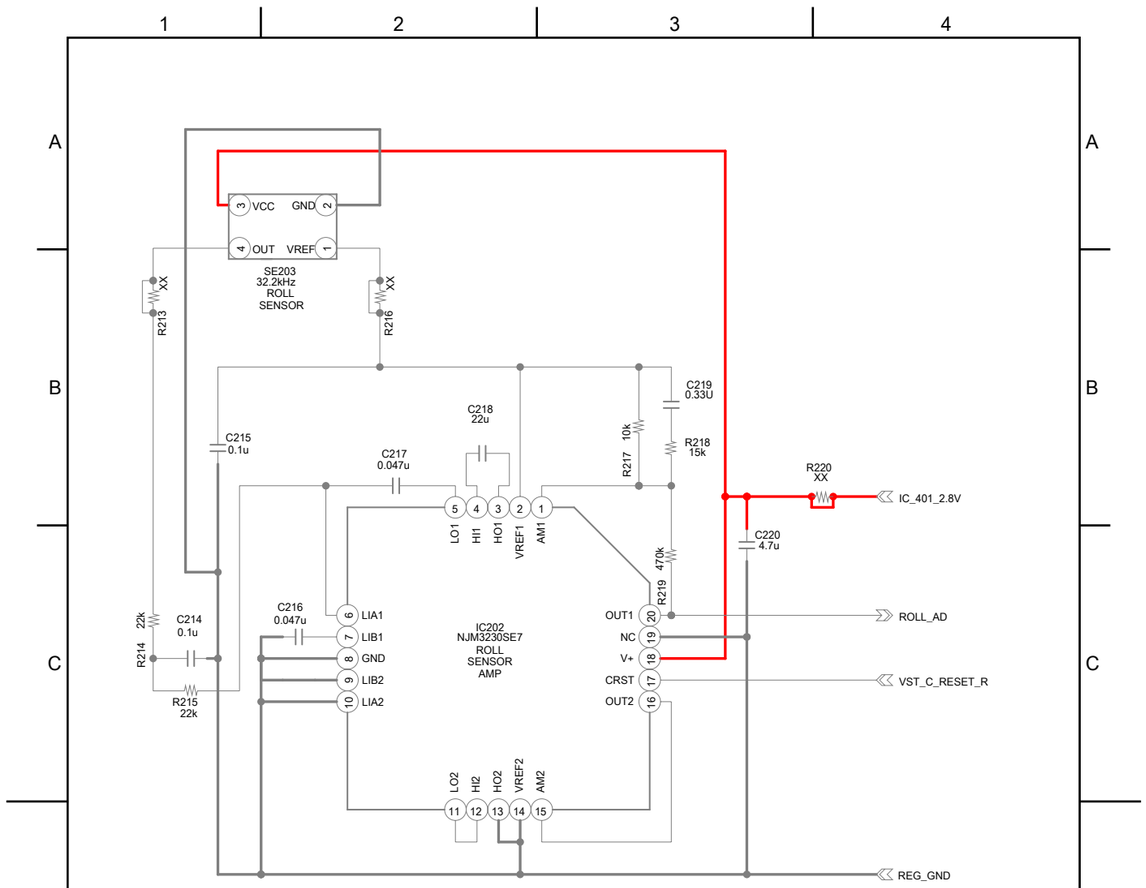
Note 2: C901 and C902 are not included in RL-109 COMPLETE BOARD.

RL-109 BOARD (2/5)

FLASH DRIVE

XX MARK: NO MOUNT

08

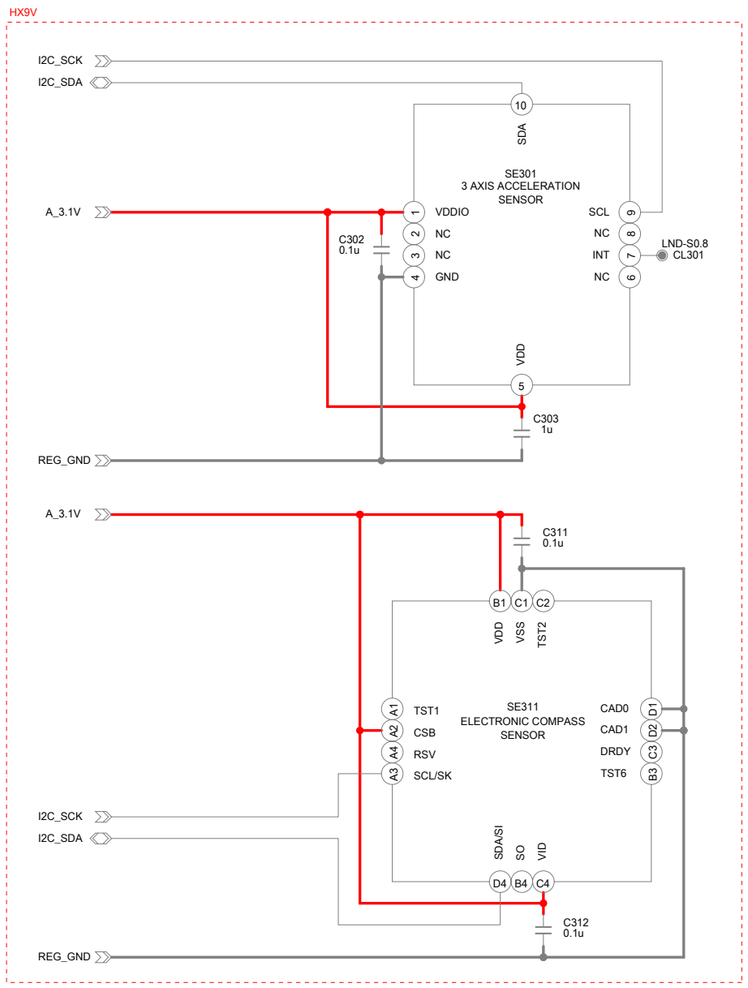


Note: All mounted parts are not supplied, but they are RL-109 COMPLETE BOARD.

RL-109 BOARD (3/5)

ROLL SENSOR

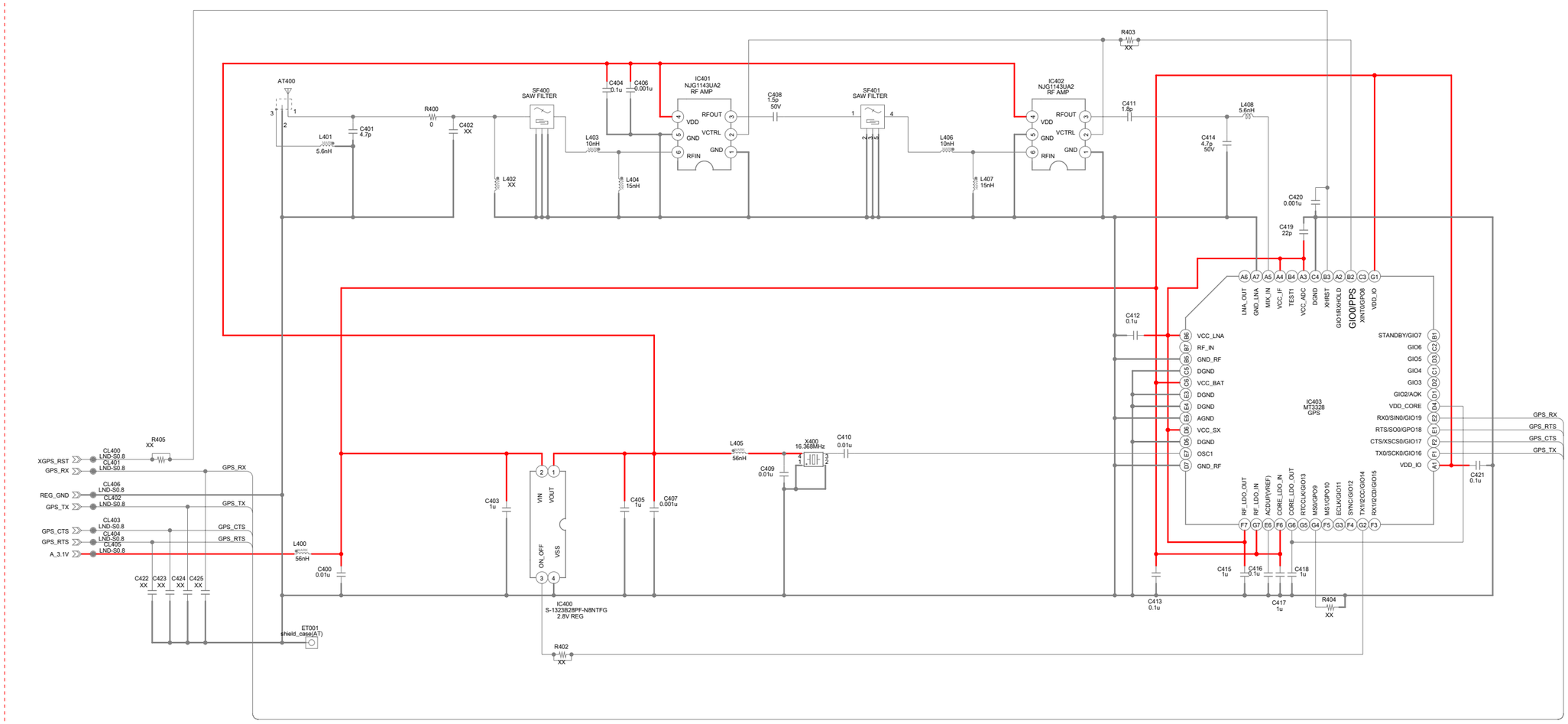
XX MARK: NO MOUNT



Note: All mounted parts are not supplied, but they are RL-109 COMPLETE BOARD.

RL-109 BOARD (4/5)

3 AXIS ACCELERATION SENSOR,
ELECTRONIC COMPASS SENSOR

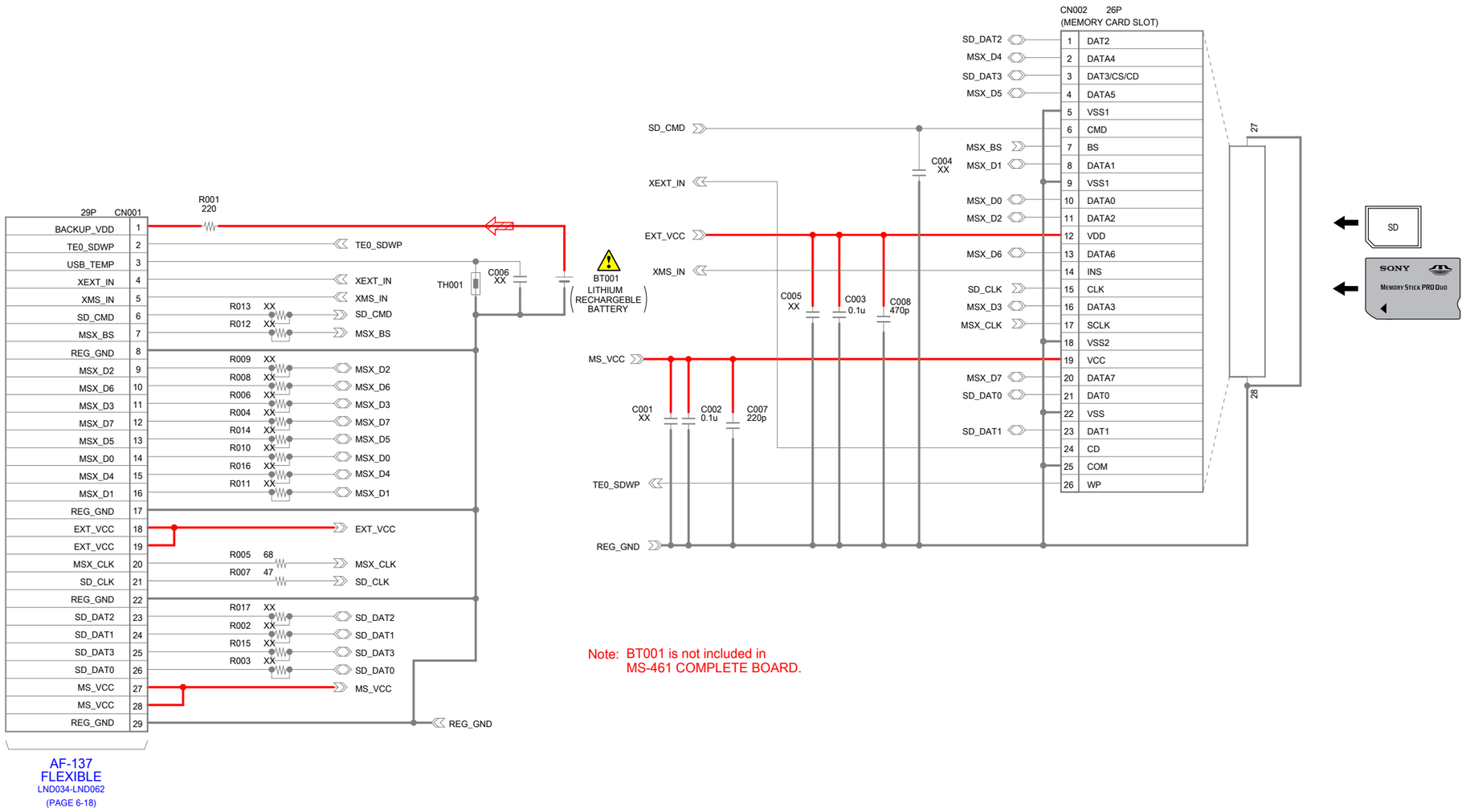


Note: All mounted parts are not supplied, but they are RL-109 COMPLETE BOARD.

RL-109 BOARD (5/5)

GPS

XX MARK: NO MOUNT

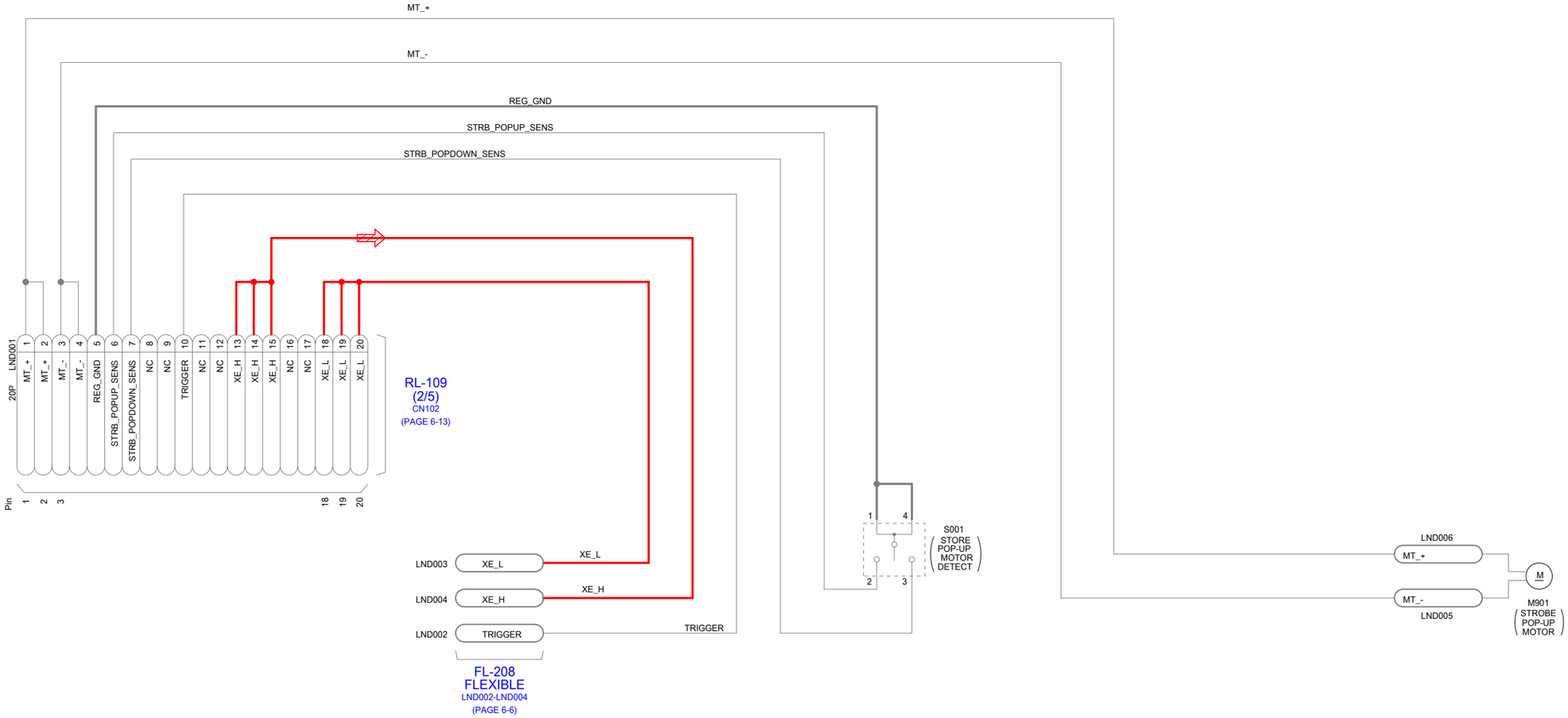


Note: BT001 is not included in
MS-461 COMPLETE BOARD.

MS-461 BOARD

MEMORY CARD SLOT

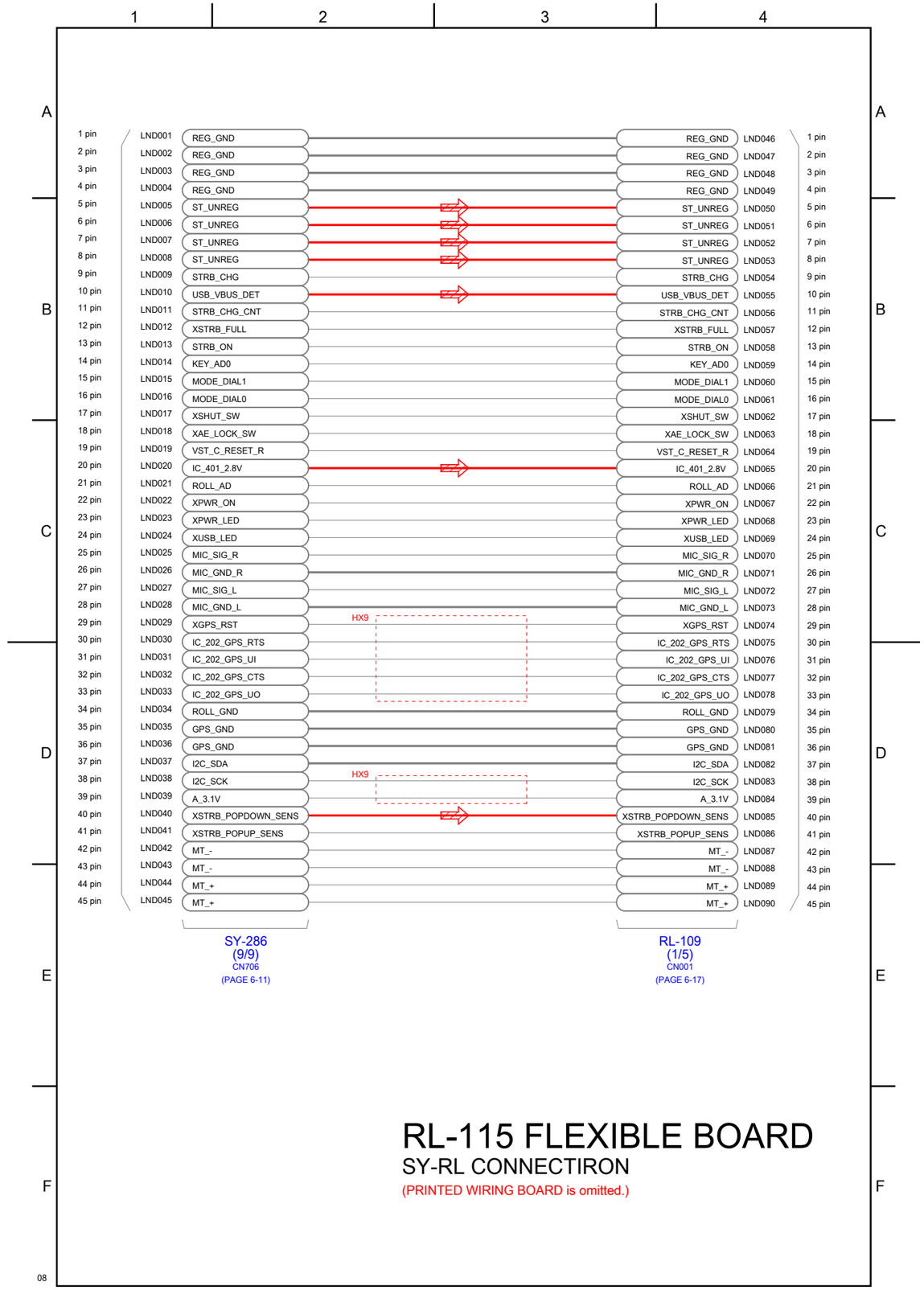
XX MARK: NO MOUNT



Note: ST-262 FLEXIBLE BOARD is not supplied, but this is included in STROBOSCOPE BLOCK ASSY (950).

ST-262 FLEXIBLE BOARD

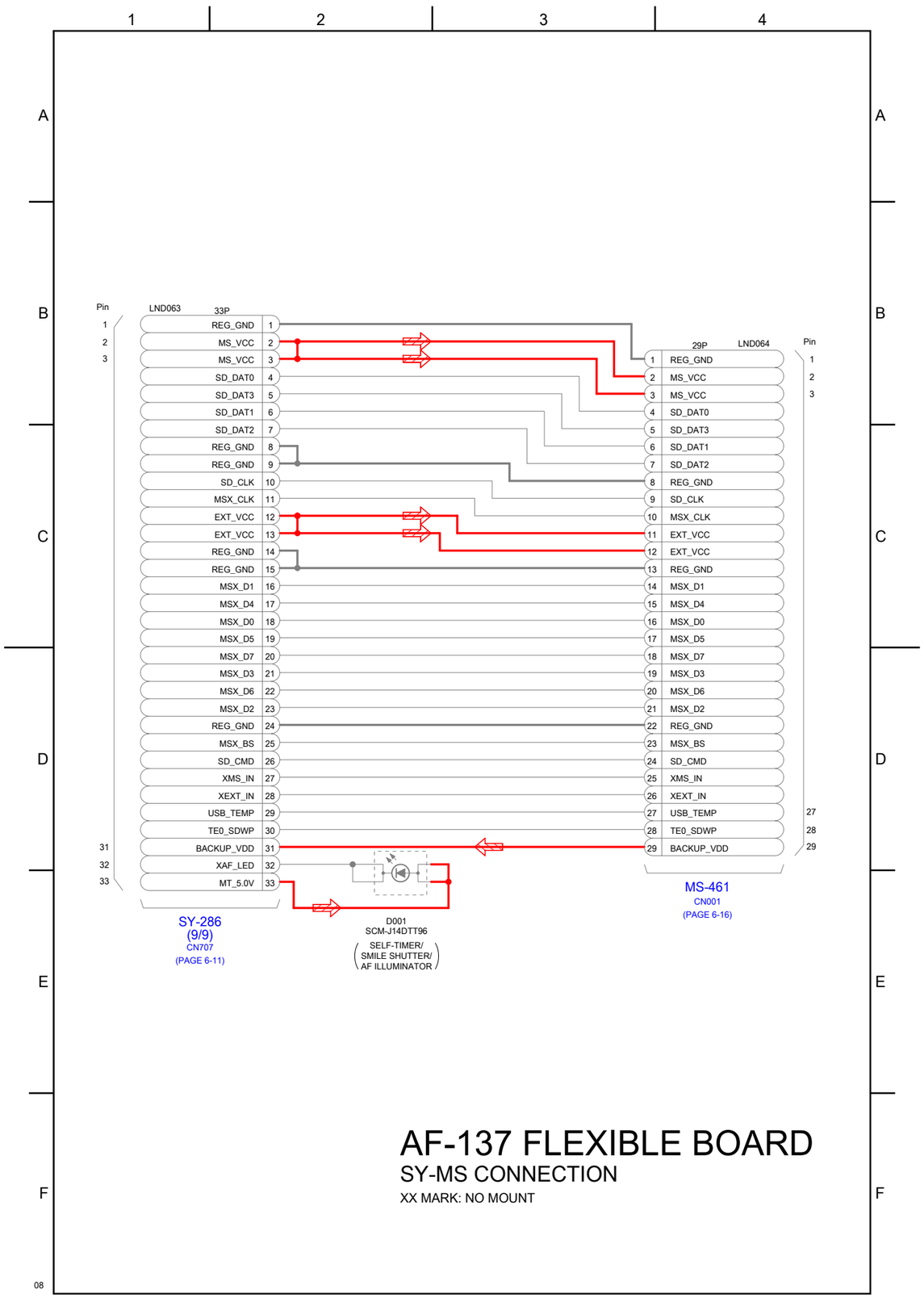
POP-UP MOTOR TERMINAL


1 2 3 4
A B C D E F
1 pin LND001 REG_GND — REG_GND LND046 1 pin
2 pin LND002 REG_GND — REG_GND LND047 2 pin
3 pin LND003 REG_GND — REG_GND LND048 3 pin
4 pin LND004 REG_GND — REG_GND LND049 4 pin
5 pin LND005 ST_UNREG — ST_UNREG LND050 5 pin
6 pin LND006 ST_UNREG — ST_UNREG LND051 6 pin
7 pin LND007 ST_UNREG — ST_UNREG LND052 7 pin
8 pin LND008 ST_UNREG — ST_UNREG LND053 8 pin
9 pin LND009 STRB_CHG — STRB_CHG LND054 9 pin
10 pin LND010 USB_VBUS_DET — USB_VBUS_DET LND055 10 pin
11 pin LND011 STRB_CHG_CNT — STRB_CHG_CNT LND056 11 pin
12 pin LND012 XSTRB_FULL — XSTRB_FULL LND057 12 pin
13 pin LND013 STRB_ON — STRB_ON LND058 13 pin
14 pin LND014 KEY_AD0 — KEY_AD0 LND059 14 pin
15 pin LND015 MODE_DIAL1 — MODE_DIAL1 LND060 15 pin
16 pin LND016 MODE_DIAL0 — MODE_DIAL0 LND061 16 pin
17 pin LND017 XSHUT_SW — XSHUT_SW LND062 17 pin
18 pin LND018 XAE_LOCK_SW — XAE_LOCK_SW LND063 18 pin
19 pin LND019 VST_C_RESET_R — VST_C_RESET_R LND064 19 pin
20 pin LND020 IC_401_2.8V — IC_401_2.8V LND065 20 pin
21 pin LND021 ROLL_AD — ROLL_AD LND066 21 pin
22 pin LND022 XPWR_ON — XPWR_ON LND067 22 pin
23 pin LND023 XPWR_LED — XPWR_LED LND068 23 pin
24 pin LND024 XUSB_LED — XUSB_LED LND069 24 pin
25 pin LND025 MIC_SIG_R — MIC_SIG_R LND070 25 pin
26 pin LND026 MIC_GND_R — MIC_GND_R LND071 26 pin
27 pin LND027 MIC_SIG_L — MIC_SIG_L LND072 27 pin
28 pin LND028 MIC_GND_L — MIC_GND_L LND073 28 pin
29 pin LND029 XGPS_RST — XGPS_RST LND074 29 pin
30 pin LND030 IC_202_GPS_RTS — IC_202_GPS_RTS LND075 30 pin
31 pin LND031 IC_202_GPS_UI — IC_202_GPS_UI LND076 31 pin
32 pin LND032 IC_202_GPS_CTS — IC_202_GPS_CTS LND077 32 pin
33 pin LND033 IC_202_GPS_UO — IC_202_GPS_UO LND078 33 pin
34 pin LND034 ROLL_GND — ROLL_GND LND079 34 pin
35 pin LND035 GPS_GND — GPS_GND LND080 35 pin
36 pin LND036 GPS_GND — GPS_GND LND081 36 pin
37 pin LND037 I2C_SDA — I2C_SDA LND082 37 pin
38 pin LND038 I2C_SCK — I2C_SCK LND083 38 pin
39 pin LND039 A_3.1V — A_3.1V LND084 39 pin
40 pin LND040 XSTRB_POPDOWN_SENS — XSTRB_POPDOWN_SENS LND085 40 pin
41 pin LND041 XSTRB_POPUP_SENS — XSTRB_POPUP_SENS LND086 41 pin
42 pin LND042 MT_- — MT_- LND087 42 pin
43 pin LND043 MT_- — MT_- LND088 43 pin
44 pin LND044 MT_+ — MT_+ LND089 44 pin
45 pin LND045 MT_+ — MT_+ LND090 45 pin
HX9
HX9
SY-286 (9/9) CN706 (PAGE 6-11)
RL-109 (1/5) CN001 (PAGE 6-17)
08

RL-115 FLEXIBLE BOARD

SY-RL CONNECTIRON

(PRINTED WIRING BOARD is omitted.)

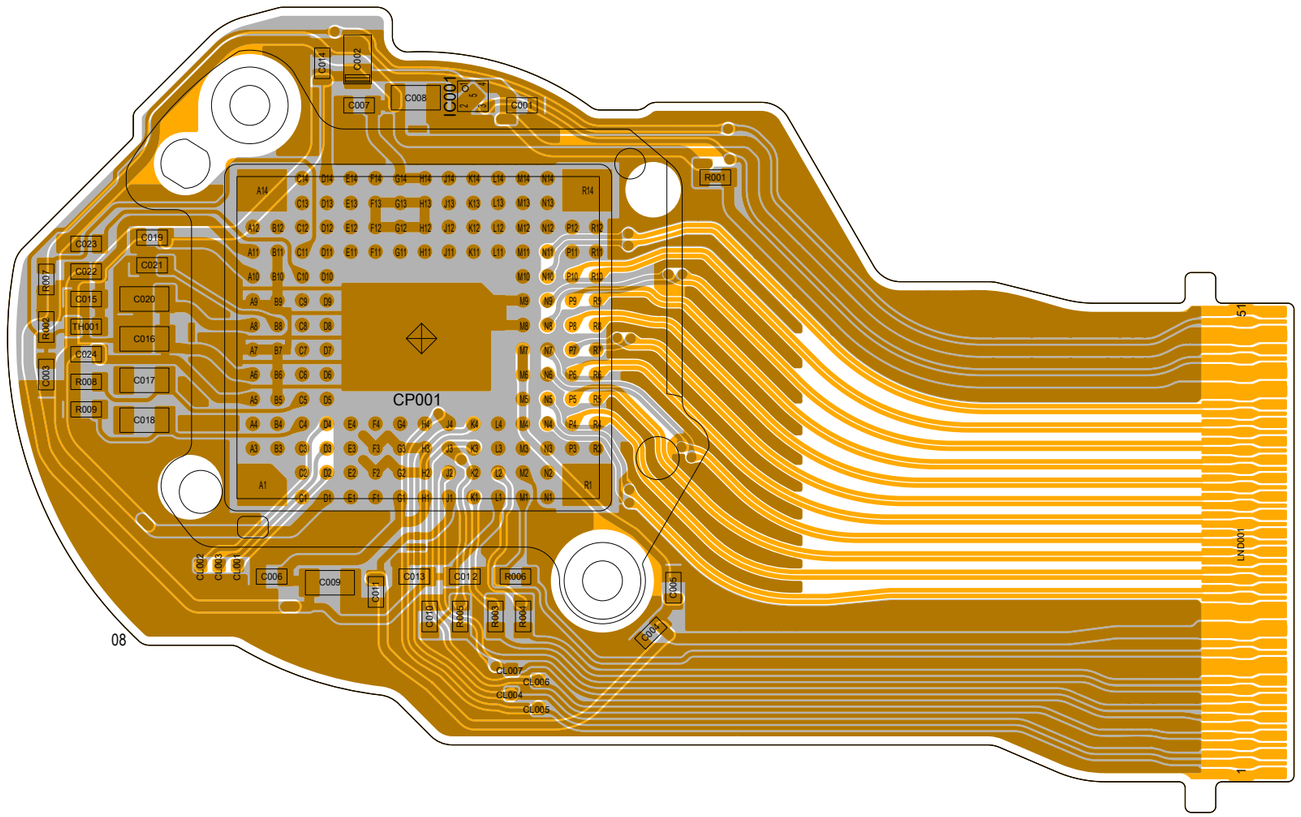


AF-137 FLEXIBLE BOARD

SY-MS CONNECTION

XX MARK: NO MOUNT

CD-813 FLEXIBLE BOARD

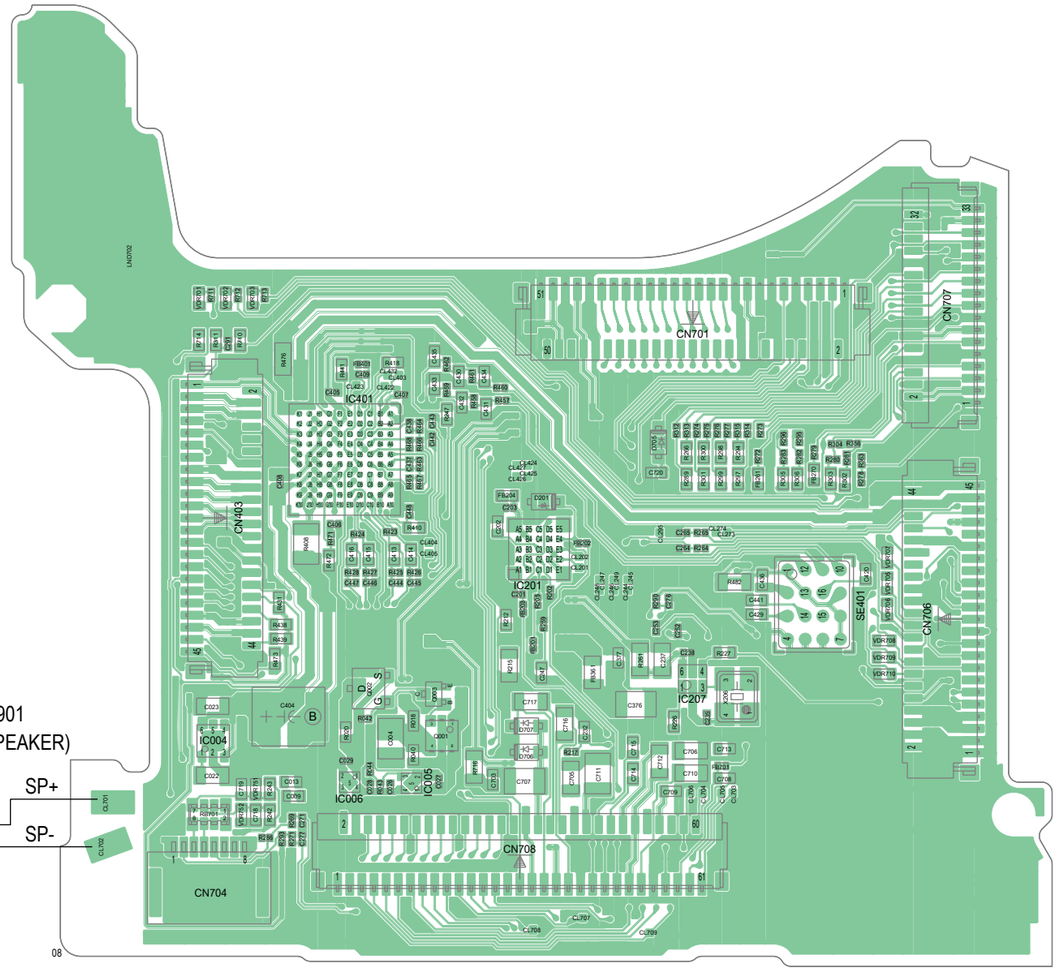


Note: All mounted parts are not supplied, but they are included in CD-813 FLEXIBLE COMPLETE BOARD.

1-882-804- 11

: Uses unleaded solder.

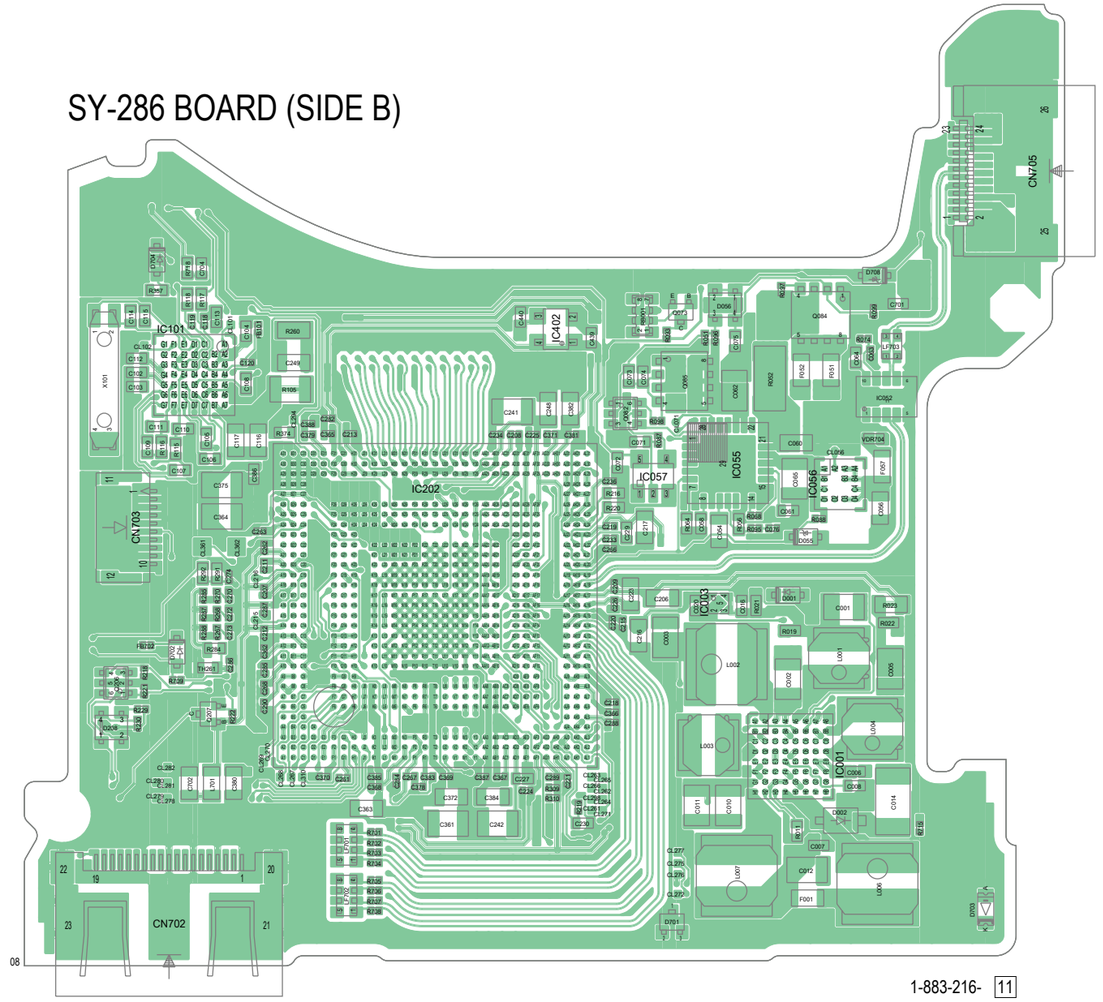
SY-286 BOARD (SIDE A)



1-883-216- 11

Note: SP901 is not included in SY-286 COMPLETE BOARD.

SY-286 BOARD (SIDE B)

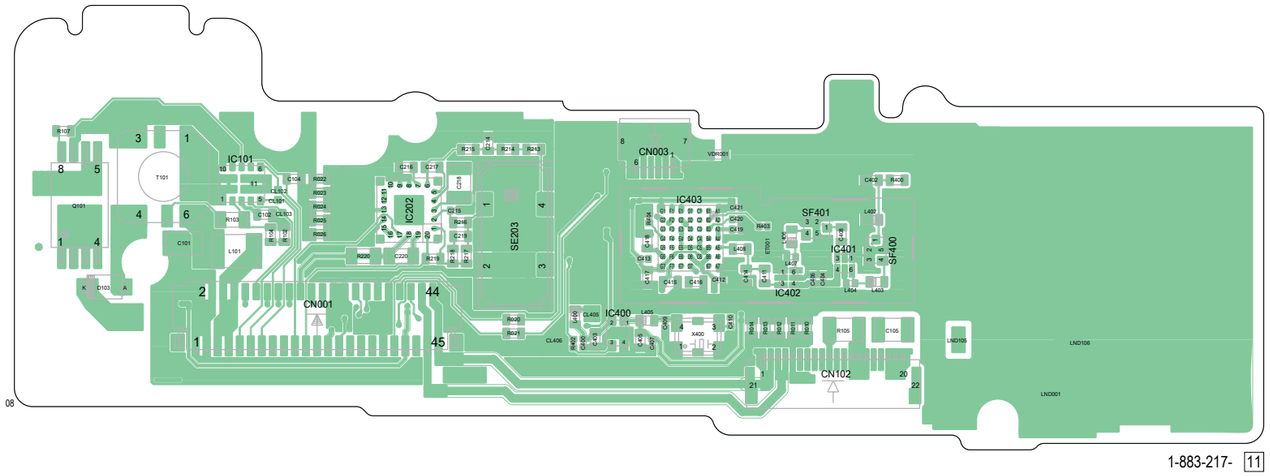


1-883-216- 11

Note: IC202 is not supplied, but this is included in SY-286 COMPLETE BOARD.

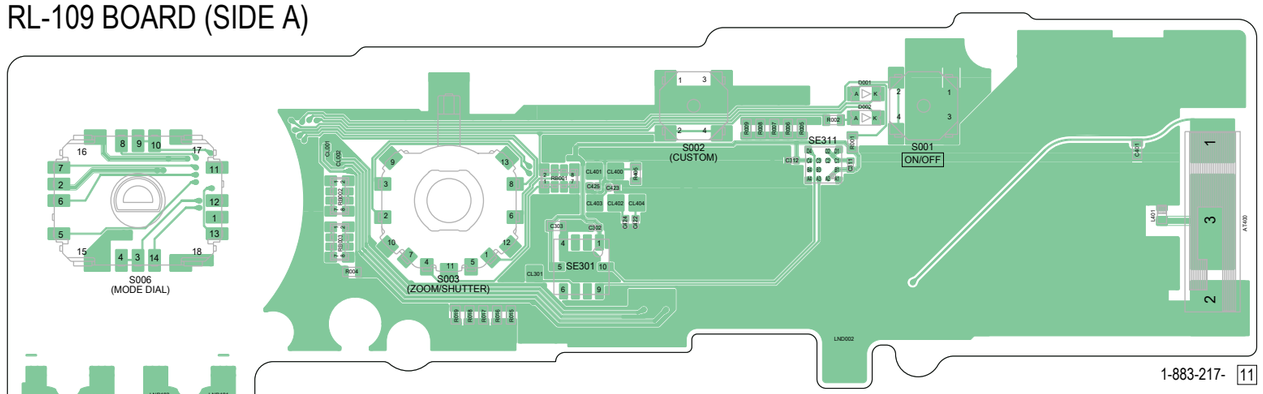
: Uses unleaded solder.

RL-109 BOARD (SIDE B)



1-883-217- 11

RL-109 BOARD (SIDE A)



1-883-217- 11

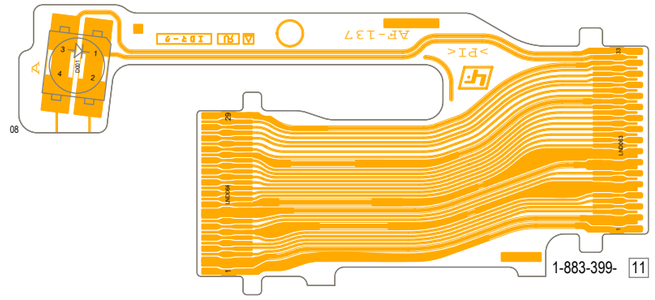
C901 (CHARGING CAPACITOR)

C902 (CHARGING CAPACITOR)

Note 1: All mounted parts are not supplied, but they are RL-109 COMPLETE BOARD.

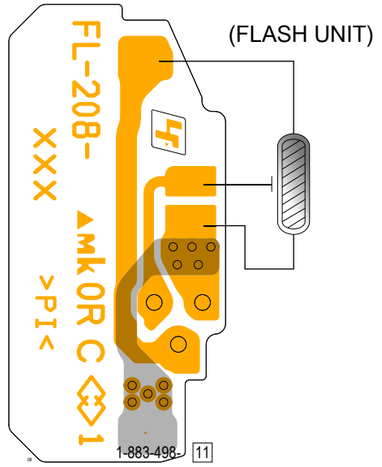
Note 2: C901 and C902 are not included in RL-109 COMPLETE BOARD.

AF-137 FLEXIBLE BOARD



1-883-399- 11

FL-208 FLEXIBLE BOARD

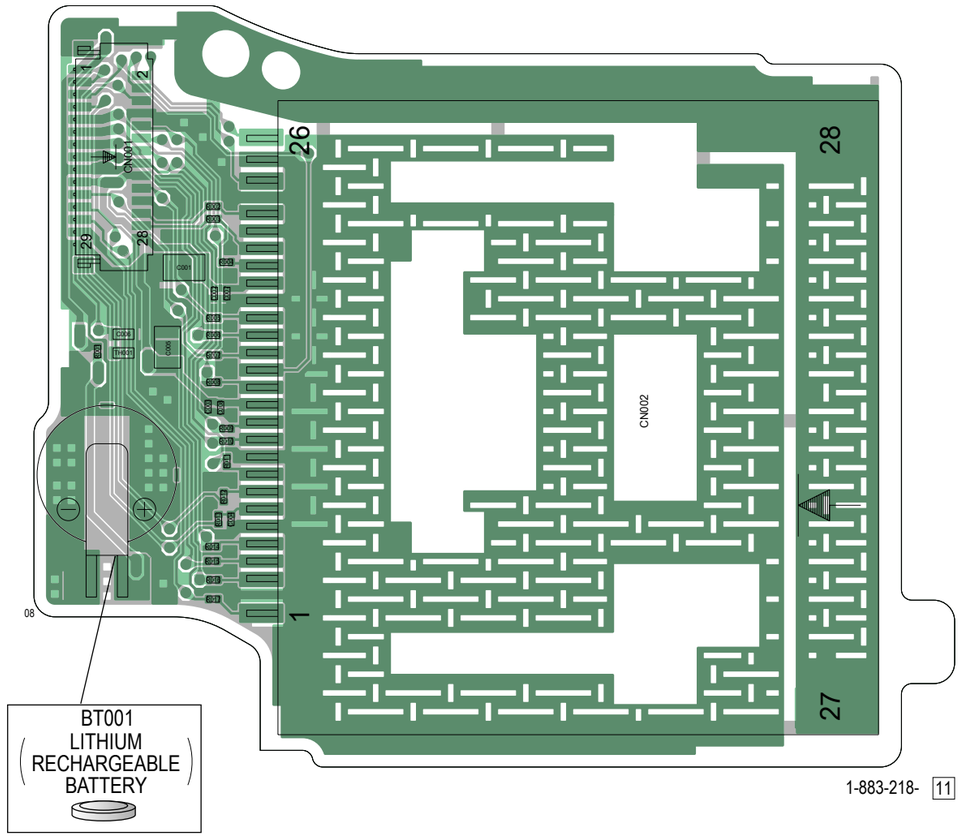


1-883-498- 11

Note: FL-208 FLEXIBLE BOARD is not supplied, but this is included in STROBOSCOPE BLOCK ASSY (950).

: Uses unleaded solder.

MS-461 BOARD

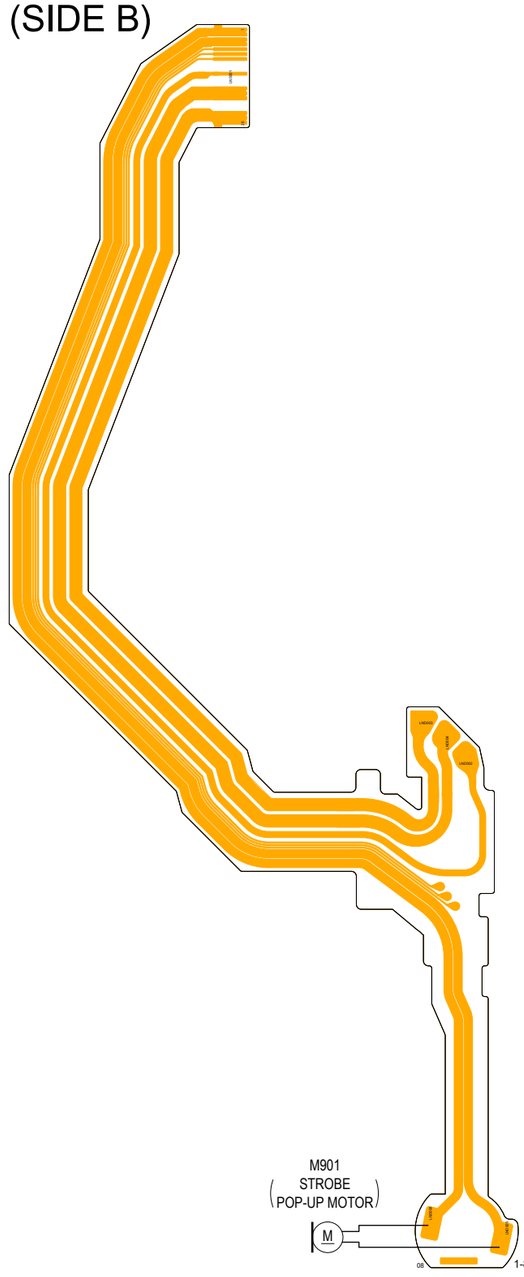


Note: BT001 is not included in MS-461 COMPLETE BOARD.

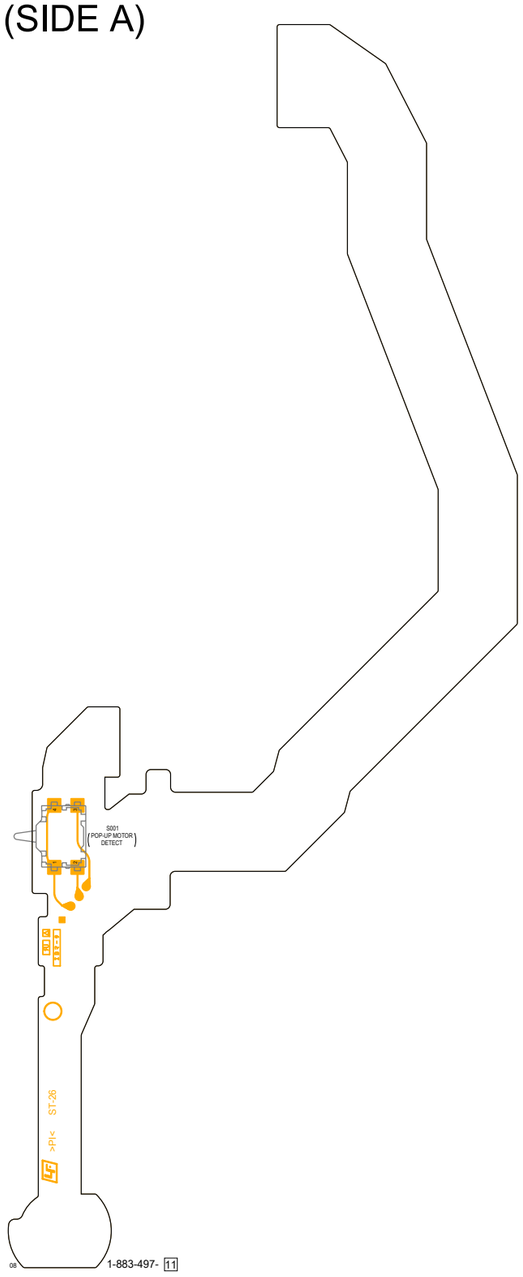
Caution
Danger of explosion if battery is incorrectly replaced.
Replace only with the same or equivalent type.
Dispose of used batteries according to the instructions.

注意
電池の交換は，正しく行わないと破裂する恐れがあります。
電池を交換する場合には必ず同じ型名の電池又は同等品と交換してください。
使用済み電池は，取扱指示に従って処分してください。

ST-262 FLEXIBLE BOARD (SIDE B)



ST-262 FLEXIBLE BOARD (SIDE A)



Note: ST-262 FLEXIBLE BOARD is not supplied, but this is included in STROBOSCOPE BLOCK ASSY (950).

DSC-HX9/HX9V

SONY

LEVEL 3

SERVICE MANUAL

Ver. 1.1 2011.07

US Model
Canadian Model
AEP Model
UK Model
E Model
Australian Model
Hong Kong Model
Chinese Model
Korea Model
Japanese Model
Tourist Model

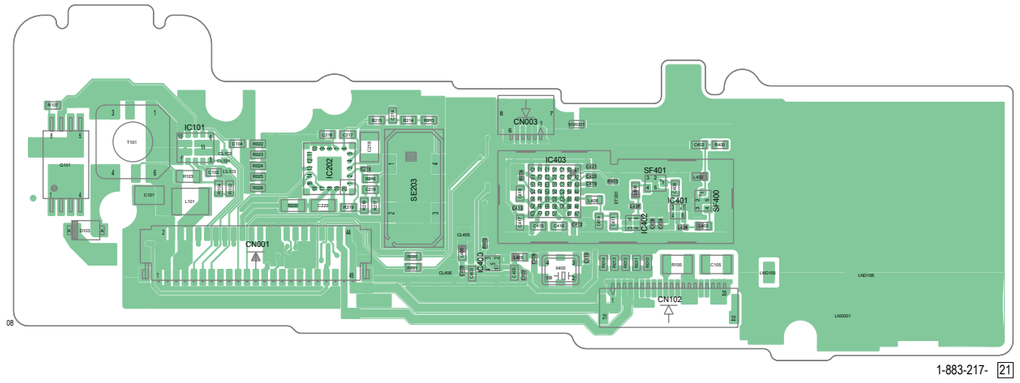
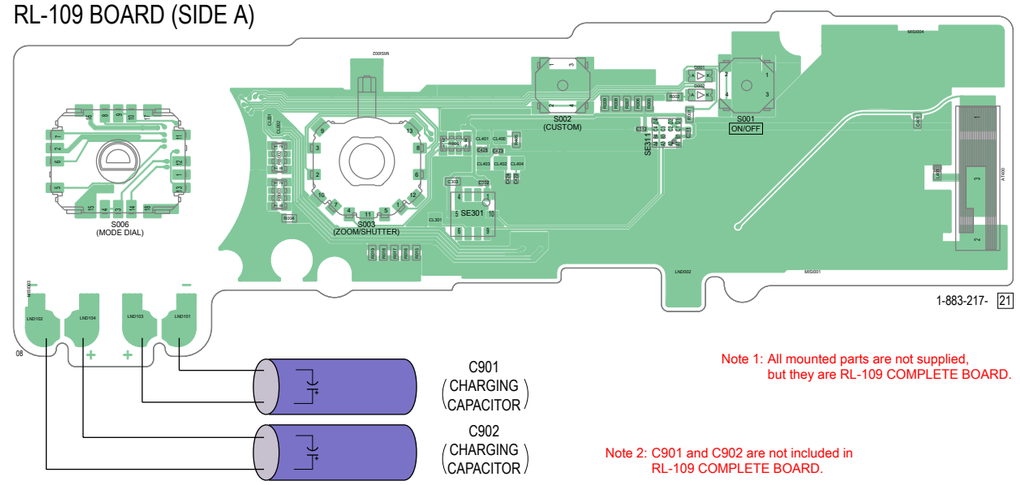
SUPPLEMENT-1

File this supplement with the service manual.
(11-154)

- **Change of PRINTED WIRING BOARDS**
- **Change of SCHEMATIC DIAGRAMS**
- **Change of RL-109 Board Part Number Suffix 11 to 21**

- **Part number suffix of RL-109 board has been changed.**
  So Suffix No. of part number for RL-109 board has been changed from 11 to 21.
  This SUPPLEMENT-1 describes Suffix No. 21.
  For Suffix No. 11, refer to ORIGINAL SERVICE MANUAL.

6. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS
6-2. PRINTED WIRING BOARDS

Page	Suffix: -21
6-21	RL-109 BOARD RL-109 BOARD (SIDE B)  1-883-217- 21 RL-109 BOARD (SIDE A)  1-883-217- 21 Note 1: All mounted parts are not supplied, but they are RL-109 COMPLETE BOARD. Note 2: C901 and C902 are not included in RL-109 COMPLETE BOARD.

Sony Corporation

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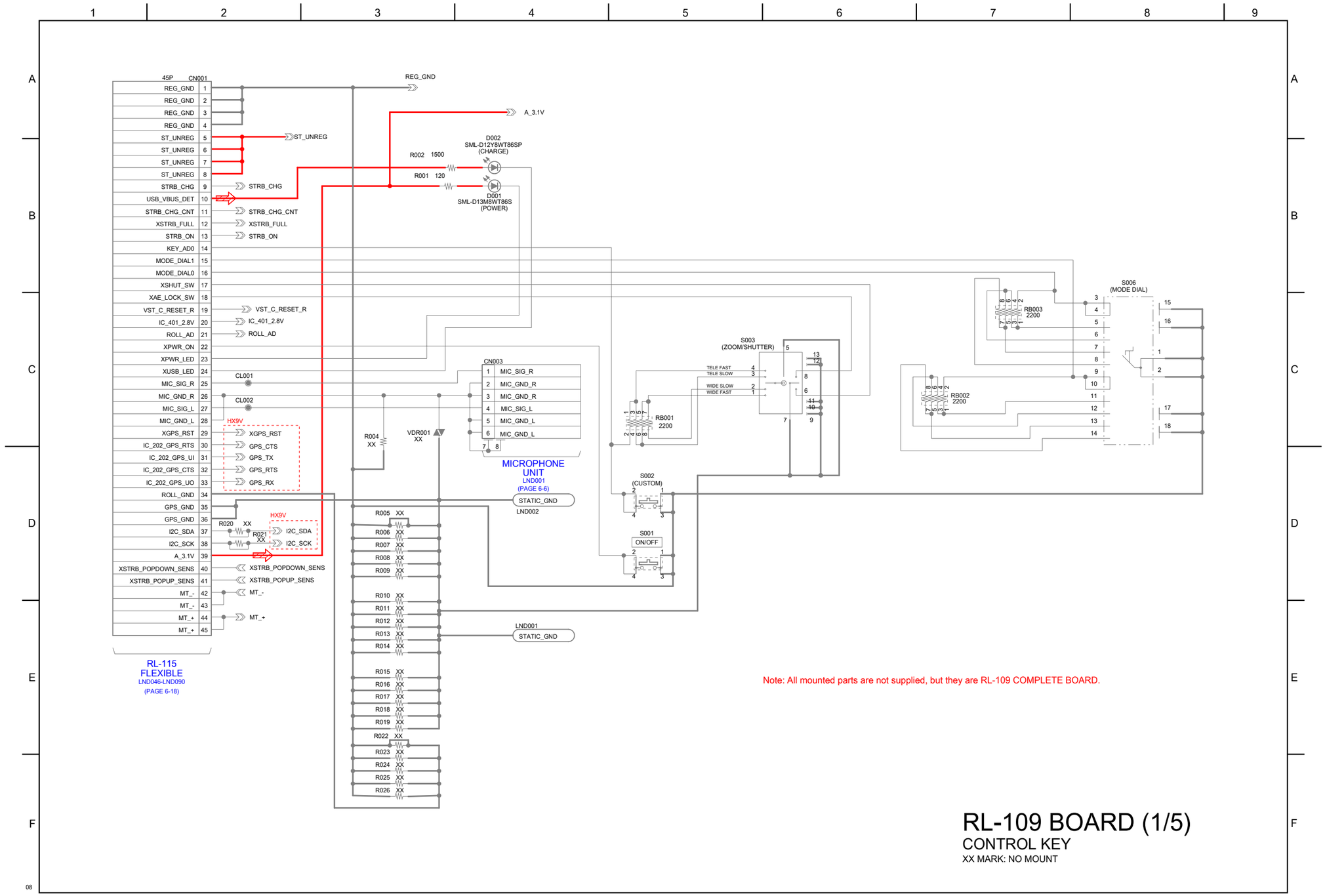
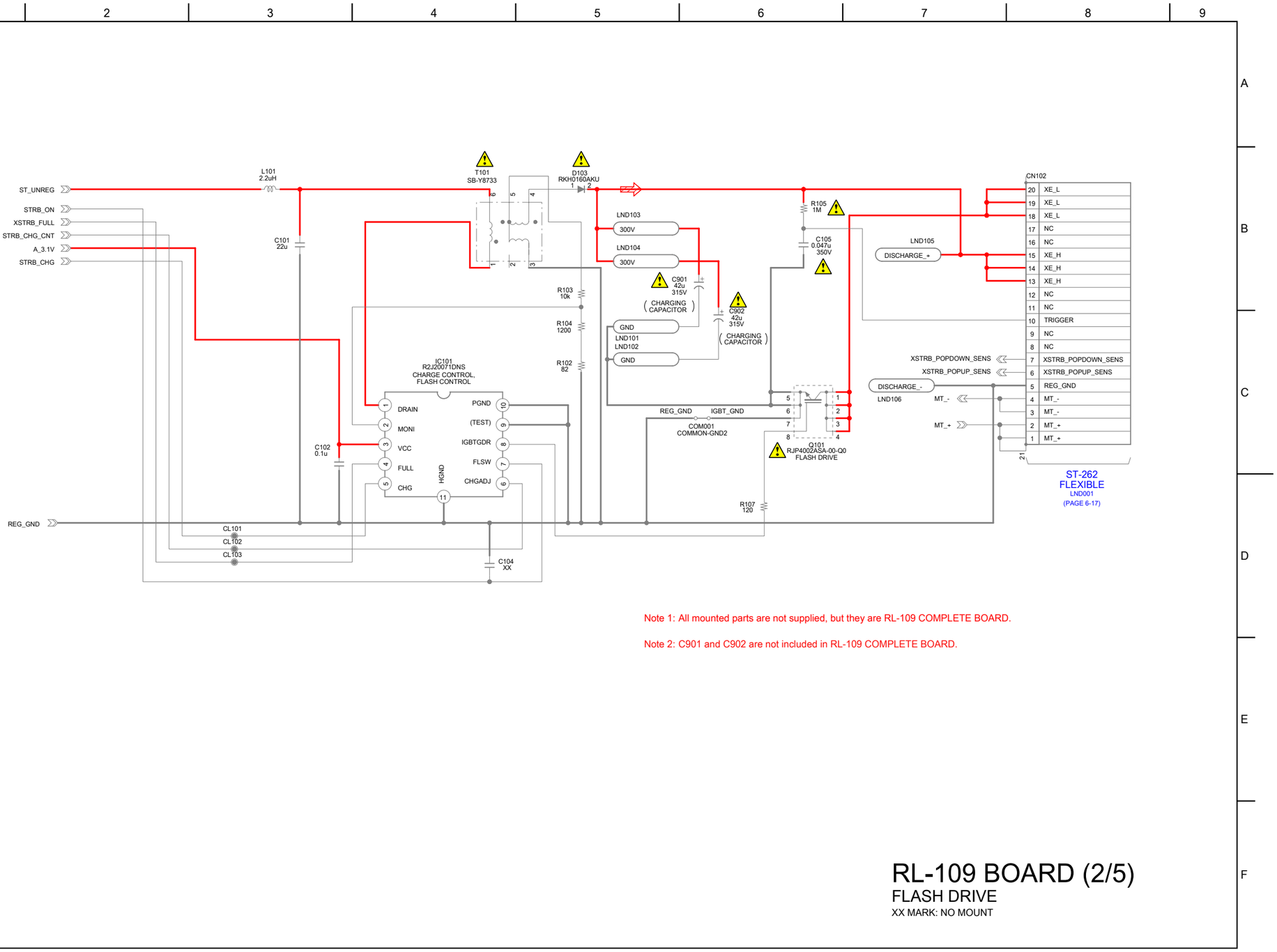
6-1. SCHEMATIC DIAGRAMS

Page	Suffix: -21
6-12	RL-109 BOARD (1/5)



Page	Suffix: -21
6-13	RL-109 BOARD (2/5)



Note 1: All mounted parts are not supplied, but they are RL-109 COMPLETE BOARD.

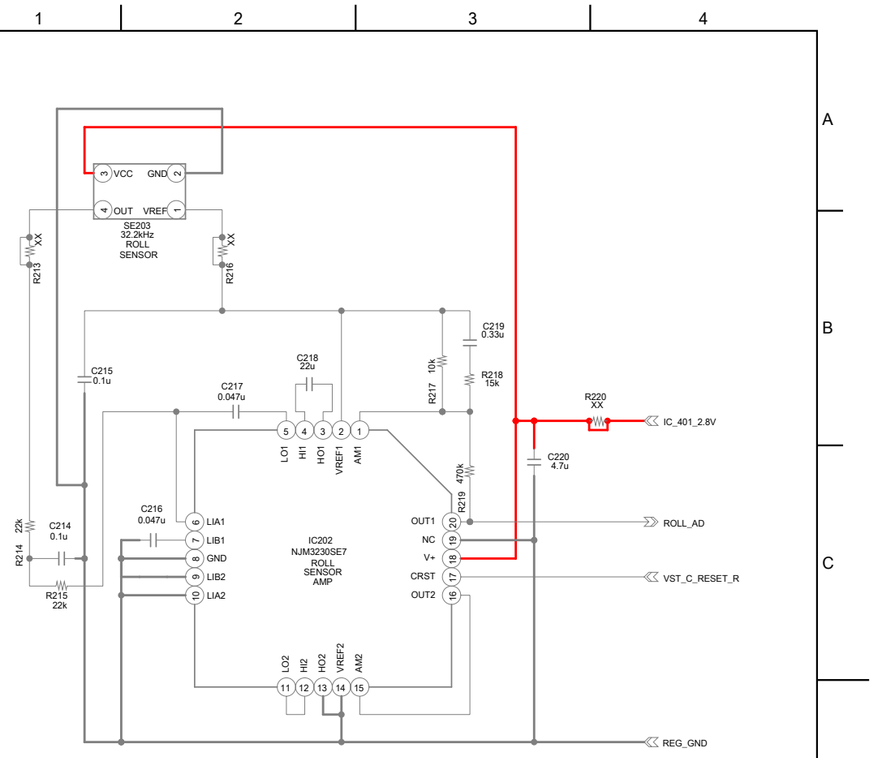
Note 2: C901 and C902 are not included in RL-109 COMPLETE BOARD.

RL-109 BOARD (2/5)

FLASH DRIVE

XX MARK: NO MOUNT

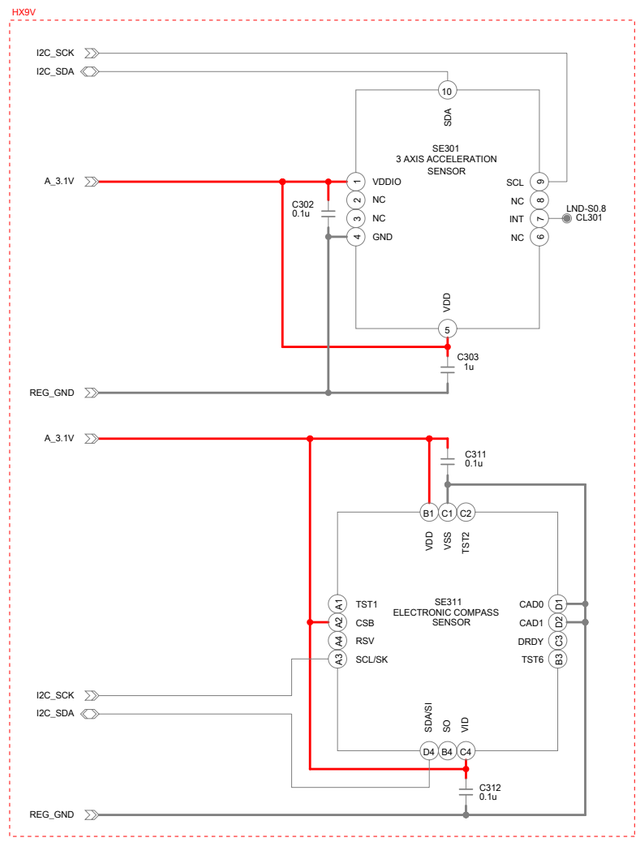
Page	Suffix: -21
6-14	RL-109 BOARD (3/5)



Note: All mounted parts are not supplied, but they are RL-109 COMPLETE BOARD.

RL-109 BOARD (3/5)
ROLL SENSOR
XX MARK: NO MOUNT

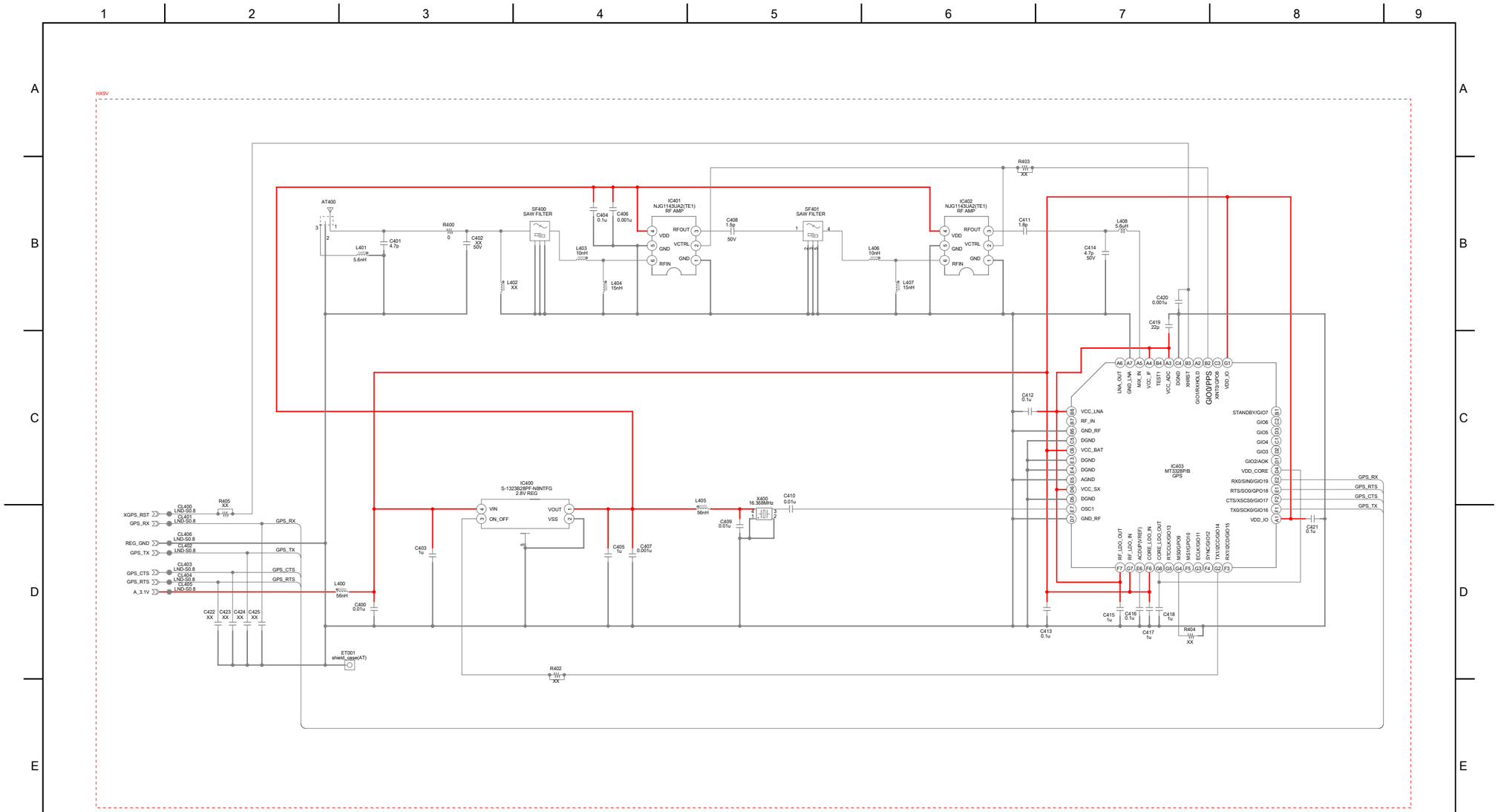
Page	Suffix: -21
6-14	RL-109 BOARD (4/5)



Note: All mounted parts are not supplied, but they are RL-109 COMPLETE BOARD.

RL-109 BOARD (4/5)
3 AXIS ACCELERATION SENSOR,
ELECTRONIC COMPASS SENSOR

Page	Suffix: -21
6-15	RL-109 BOARD (5/5)



Note: All mounted parts are not supplied, but they are RL-109 COMPLETE BOARD.

RL-109 BOARD (5/5)

GPS

XX MARK: NO MOUNT